

impero education pro

Console Guide

Impero learning series

English

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power at your fingertips

impero

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1 The Basics

The Basics section provides information on the layout and identifies key areas within the Impero Console.

1.1 Open Impero Console

To begin using Impero, locate the 'Impero Console' shortcut icon (Image 1) on a Windows desktop and double click on it.

Alternatively, in the system tray locate the Impero icon (Image 1.1) and click on it once, then select 'Open Impero Console'.



Image 1. Desktop Icon



Image 1.1. System Tray Icon

The first time you launch the Console you are prompted with the password entry box* (Image 1.2) If you are permitted access, the Impero Console then opens (Image 1.3). You see the password prompt the first time you launch the Console for every log in session. If you close the Console and re-open it without logging out of your operating system, the password prompt is not displayed.

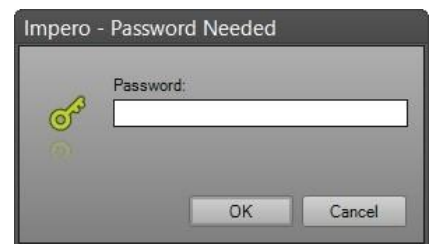


Image 1.2. Password box

***Note:** If you are not sure of your password, please contact your network administrator.

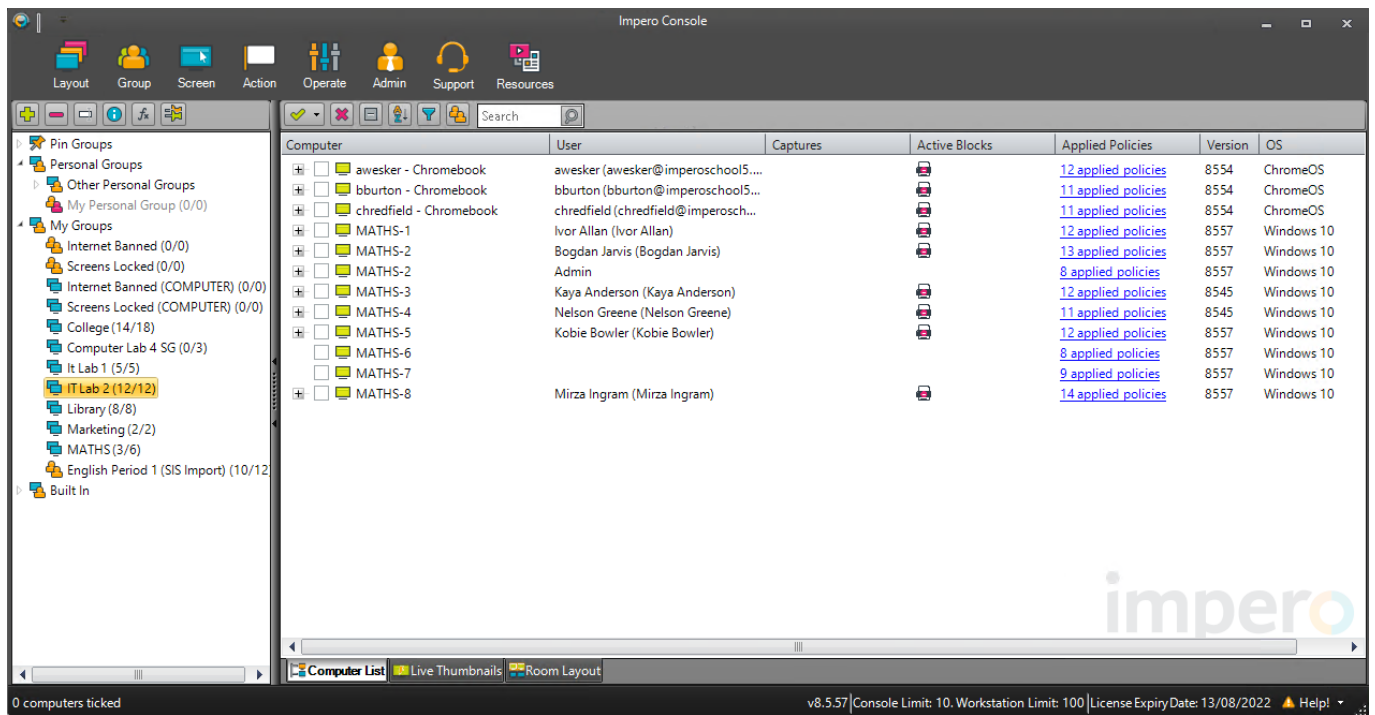


Image 1.3 - Impero Console

1.2 Screen Layout

The Console is split into three main panels (Image 2), each containing various tools to help you administer Impero users.

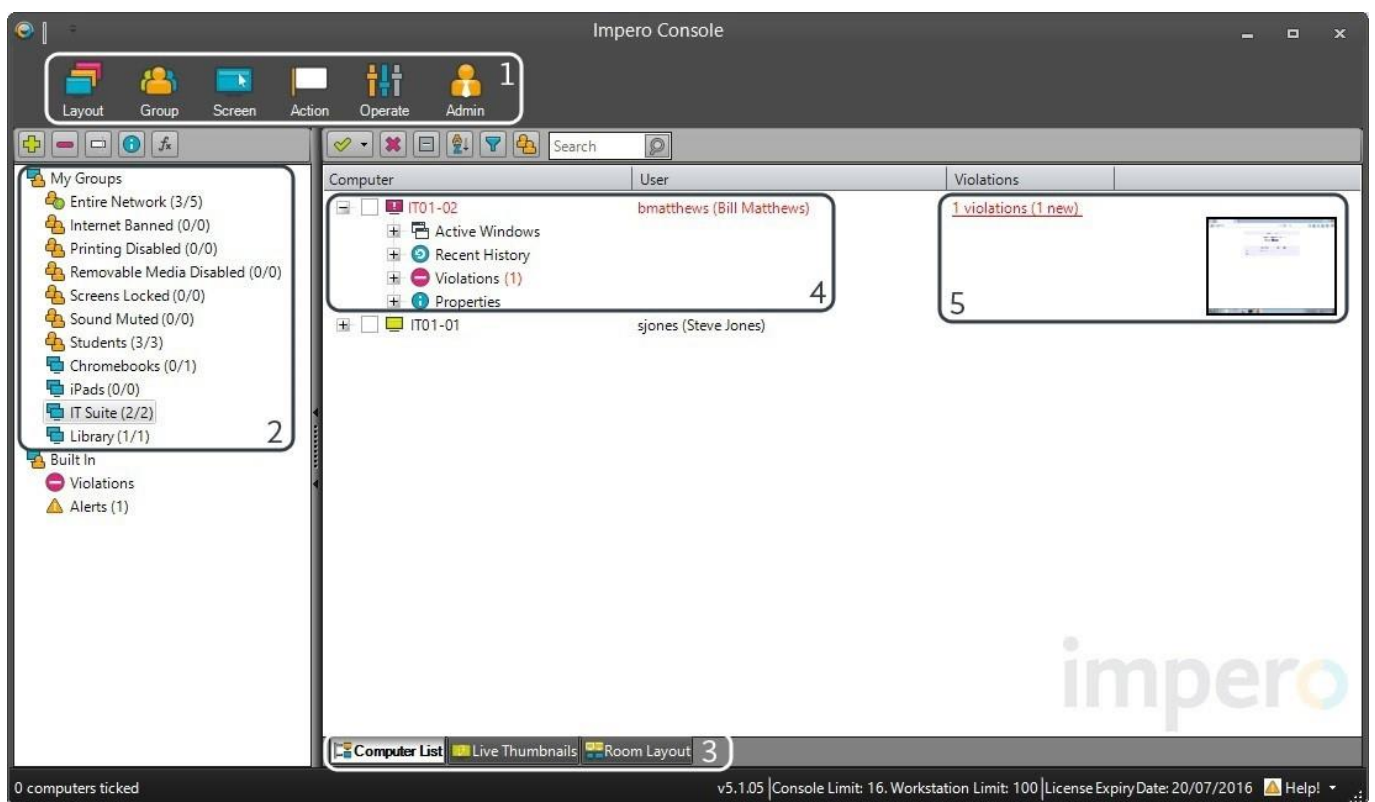


Image 2 - Impero Console

1. **Toolbars:** The toolbar area has been created by grouping similar features together to allow you to perform similar tasks from just one area. Click on the toolbar icons to see more tools open in the ribbon below.
2. **Groups:** Allows you to switch between the different groups that you have access to.
3. **View Tabs:** The view tabs are located at the bottom of the Impero console and allow you to switch between different user views.
4. **User Activity:** This reports various information regarding user activity during their session.
5. **Violations:** The user account turns red for quick identification of users who have gone off task.

1.3 View Tabs

The Impero console is able to display computers in your groups in three different views (Image 3): 'Computer List', 'Live Thumbnails' and 'Room Layout'. Each of these tabs help you perform different types of Impero tasks. You can quickly change between these views by using the tabs located at the bottom of the console, or by selecting 'Layout' in the Toolbar and then clicking on the desired view.

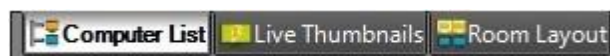


Image 3 - View Tabs

1.3.1 Computer List


You are presented with a list of computers/users for your group (Image 4). A sign in front of the computer name indicates that a user is currently logged on to that computer. When you select the sign, this expands the user account and provide further information about their activity during this session which includes: Active Windows, Recent History, Violations and Properties. If no user is currently logged on, the  sign next to the computer name does not appear and the username column appears blank. A computer/username displaying in grey indicates that the computer is currently powered-off, in standby, hibernated, or possibly the network cable is unplugged, or wireless connection has been lost.



Image 4 - Computer List

Active Windows

Displays the programs that the user currently has open (Image 4.1). You are able to select the active window and right click to either 'Close' or 'Block'. The 'Close' option shuts down the application, while the 'Block' option builds a policy to stop the user from opening this in the future.

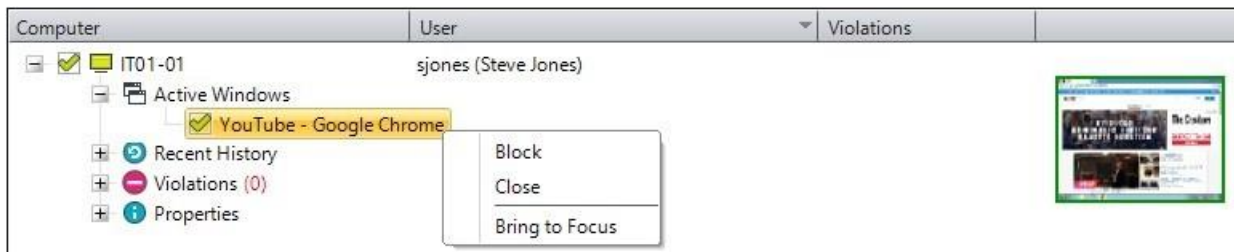


Image 4.1 - Active Windows

Click on the 'Bring to Focus' option in order to bring a particular window to the front of the screen.

Recent History

Impero keeps a copy of all Windows, Websites, Applications, Printed Documents and Files that the user has deleted from their 'My Documents' folder during this session.

Violations

If the user has visited banned websites, used blocked applications, or written banned words, then the username turns red and displays the number of violations that have occurred (Image 4.2). Hovering over each of the violations displays a screenshot taken when the violation occurred (if available).








Image 4.2 - Violations

Properties

Displays information about who is logged on and the name of the computer.

Note: Session activity is only available while the user is logged on. Once a user logs off, the quick view information is no longer displayed. The Log Viewer provides historic information about previous sessions and is also broken down by date and time.

The 'computer' icon that appears to the left of the computer name in this view can appear in a number of different colours to reflect different client statuses:

-  The client machine is currently online and active.
-  The client machine is currently online and idle.
-  The client machine is currently offline.
-  The client machine has generated violations.
-  The client machine has a remote connection to it, i.e., via Remote Desktop.

1.3.2 Live Thumbnails

This view allows you to see your entire group in real-time (Image 5). You can quickly identify if users have strayed from the task at hand. You can change the size of the live thumbnails by using the slider bar in the menu. For a better view, you can double-click on any live thumbnail to view them in their own remote control window. By default, the remote control window is set to view only, which does not disturb the user.

The header of the client thumbnail displays red if that particular user has any outstanding violations. Click on the '[Computer List](#)' view in order to view details regarding the violation that is generated.



Image 5 - Thumbnail View

There are further options available in the menu at the top of this view to perform actions on the computers, such as:



Select Computers - Mark any computers that you wish to carry out some action on.



Deselect Computers - Unmark any selected computers.



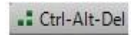
Hide Not In Use - Hide computers from your view if they are not currently in use.



View by Username - Sort the thumbnails alphabetically by username.



Search - Type in any part of a computer/username to carry out a search.



Ctrl-Alt-Del - Send a 'Ctrl-Alt-Delete' command to selected computers.



Take Control - Take control of selected remote computers.



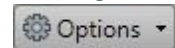
Restore Control - Restore control back to the remote computers.



Low Color Mode - This displays the thumbnails in a lower colour to reduce bandwidth.



Show Operating System - Display an icon in the thumbnail view to indicate which Operating System is running on the client machine.



Show Transparent Windows - Captures any transparent windows, i.e., in programs such as Microsoft Office. Show Mouse Pointer - Track the user's mouse pointer on the thumbnail screen.

1.3.3 Room Layout

This view gives you the ability to apply an image or photograph of your room, so it is available to view in the background. Once you arranged the icons, it is then available for future use to quickly identify users by their position in the room layout instead of by computer/username (Image 6).

The icon that displays for each client is dependent on which Operating System is running on the client machine.

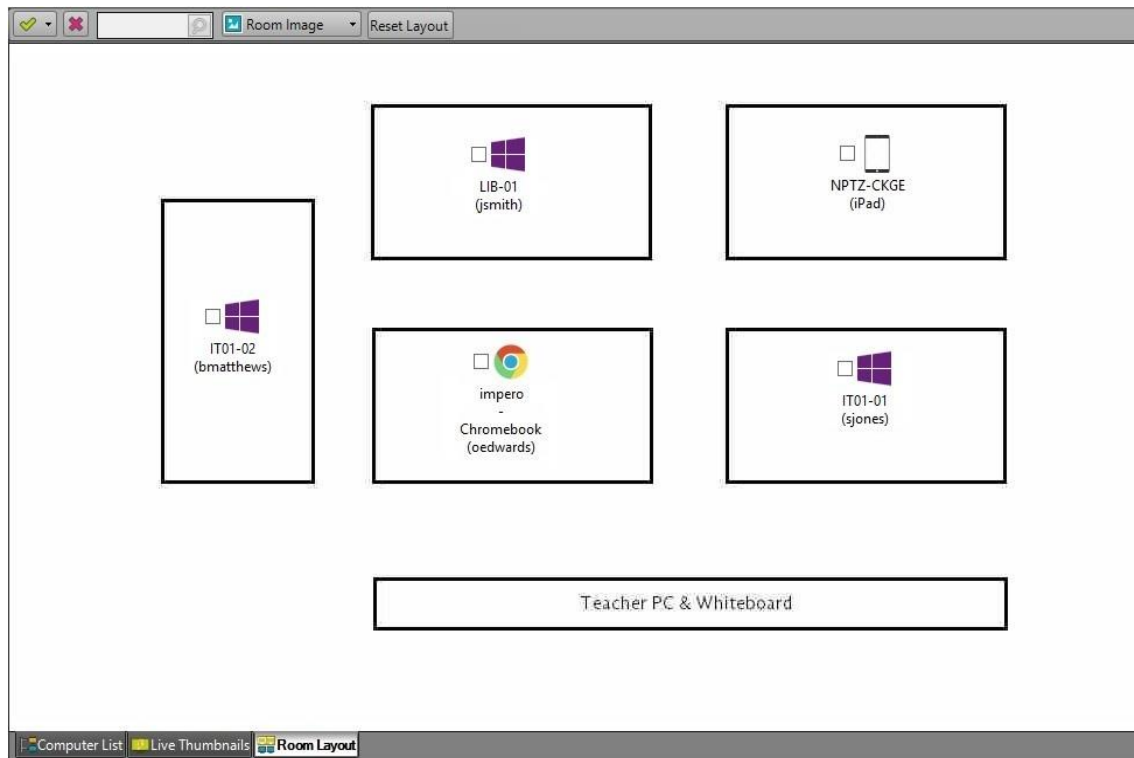


Image 6 - Room Layout

How to Set Background Image

To set a background image, proceed as follows:

1. Create a JPG, GIF or PNG image of your room.
2. From the Toolbar menu click on 'Room Image' then on 'Set Background Picture'.
3. Select the image of the room you have created in Step 1.
4. Move the icons to desired position.
5. The new room layout is automatically saved after a short while.

Note: Room layout view is only available to computer based groups.

1.4 Selecting Computers

You are able to perform any Impero function on one or more computers/users at the same time but first you must select them. Each computer has a small box next to it that you are able to put a tick in. The tick represents computers/users that are currently selected. You are able to select as many computers/users as you wish. For example, there are three selected computers/users in Image 7.



Image 7 - Select Computers/Users

Note: You can 'Tick ALL Computers' using the green tick icon in that appears in the [Quick Select Toolbar](#).

1.4.1 Users vs Computers

Impero has two types of groups: a User Group and a Computer Group. The behaviour of certain actions differs depending on which of these is selected, so it is important to identify the differences.

User groups are represented by a 👤 symbol and computer groups are represented by a 💻 symbol. The main thing to consider is that you can have different outcomes when applying blocks, locks or disabling items depending on the type of group you select.

Applying blocks, locks or disabling items on a user group 👤 affects the user no matter what computer they use. In essence, the policy follows the user around until you or someone else takes them out of that group. If you apply the same blocks to a computer group 💻, then it affects every user that accesses this group of computers until it is removed.

Examples:

Users: Disable Internet

Select one or more users and then drag and drop the users on top of the group 'Internet Banned', or right click your mouse on the user(s) and select 'Add to Group', 'Internet Banned'. It locks the Internet for these users regardless of what computer they use.

To remove these users from the 'Internet Banned' group, click on the 'Internet Banned' group and select the users you wish to remove, then right mouse click on one of them and select 'Remove from Group'. Alternatively, you could right click on 'Internet Banned' group and select 'Properties', then remove the desired users from the group by using the delete button to the right of their username.

Computers: Disable all Internet in the group

It does not matter if you have anyone selected or not because we are working with the 'Group' section of the toolbar. To disable the internet for the entire group, make sure you have the correct group highlighted and then click on 'Group' from the toolbar, 'Lock Internet'. To remove the internet block, click on 'Group' from the toolbar, 'Unlock Internet'.

1.4.2 Quick Select Toolbar

Quick Select Toolbar: clicking on the down arrow gives you additional options (Image 8).

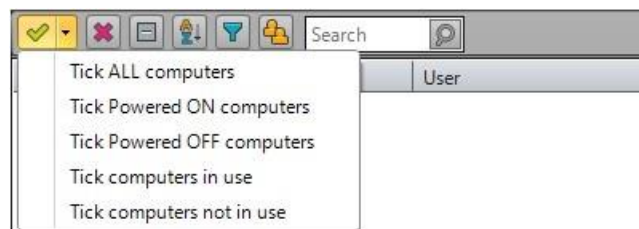


Image 8 - Quick Select Toolbar

Tick All computers: This ticks all computers in this group.

Tick Powered ON computers: This only ticks computers that are powered on.


Tick Powered OFF computers: This only ticks computers that are powered off.

Tick computers in use: This only ticks computers that have users logged on.

Tick computers not in use: This ticks only computers that are running with nobody logged on.


 This deselects all computers you have previously selected.

 This collapses all the users you have expanded.

 This alphabetically sorts the list of computers.

 Removes the grey offline computers from view.

 Sorts and displays the users alphabetically.

 This searches for any part of a computer or username you type in.

Hint: You can always click on a column heading to sort ascending or descending alphabetically.

1.4.3 Drag & Drop

Impero offers you the ability to drag and drop either computers or users into any group.

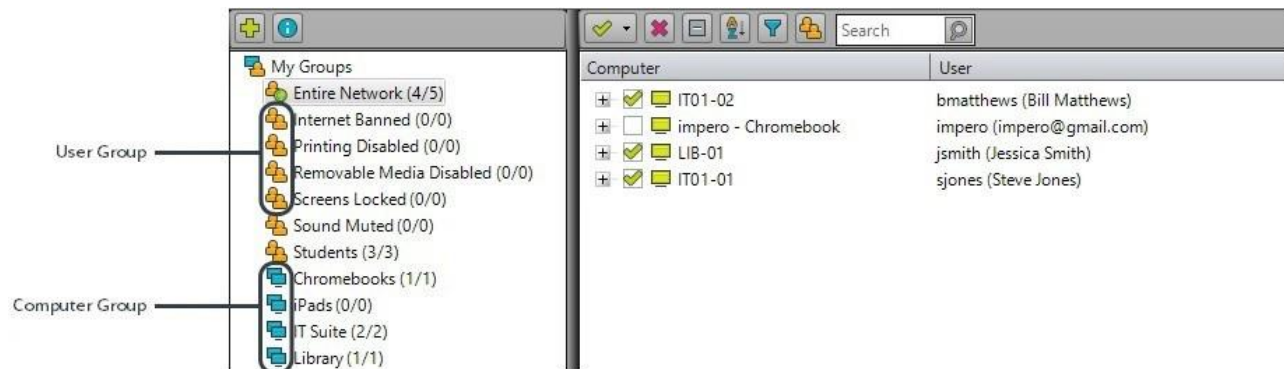




Image 9 - Computer List

[Select](#) one or more computers (Image 9), click, drag and drop into the group that you require. The behaviour of the drag and drop varies depending on the different types of groups; user groups are indicated by the  image and copies only the username to the group and not the computer name. Computer groups  copies only the computer name to the group and not the username.

1.5 Default Groups

There are six default groups that are automatically created within Impero - 'Entire Network', 'Internet Banned', 'Screens Locked', 'Printing Disabled', 'Removable Media Disabled' and 'Sound Muted'.

The 'Entire Network' group contains all computers that have the Impero Client installed to it. You may or may not see this group in your Impero Console, depending on the access rights that have been configured by your network administrator.

The remaining five default groups allow you to apply various restrictions upon selected users:

- In your Console, select the user(s) that you wish to restrict
- Drag and drop the users into the group that relates to the restriction you wish to apply
- The same action can also be performed by right-clicking your mouse and selecting 'Add to Group' followed by the relevant group

Internet Banned - Stop selected users from being able to browse the Internet

Screens Locked - Lock the screens of selected users

Printing Disabled - Prevent selected users from being able to send print jobs

Removable Media Disabled - Stop selected users from being able to access files on any external USB device

Sound Muted - Mute sound for selected users

- You are then prompted to select how long you wish to apply the restriction for (Image 10).



Image 10 - Add to Group

- The selected users then have the restriction applied to them, i.e., web access blocked, and is displayed in the chosen group (Image 10.1).

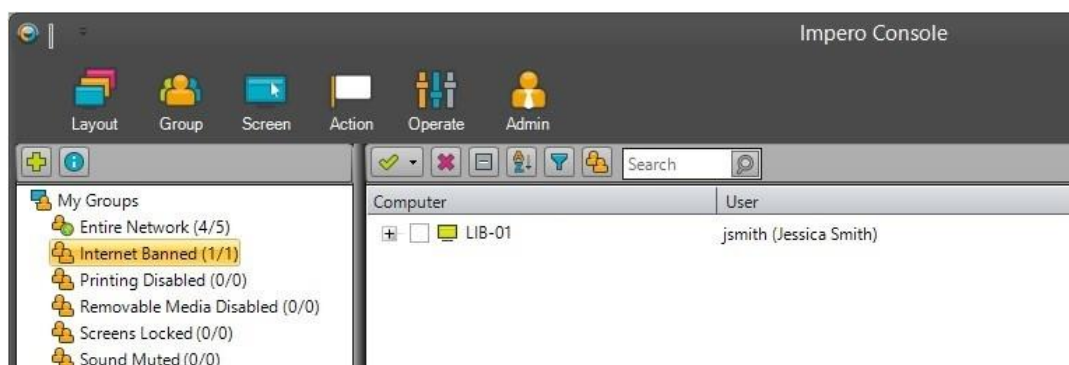


Image 10.1 - Internet Banned Group

- You have applied the restriction to the user - meaning that the user has that restriction applied to them, regardless of which computer they are logged into
- You can remove the restriction by selecting the group
- Select the users that you wish to remove the restriction from
- Right-click and select the 'Remove from group' option (Image 10.2)

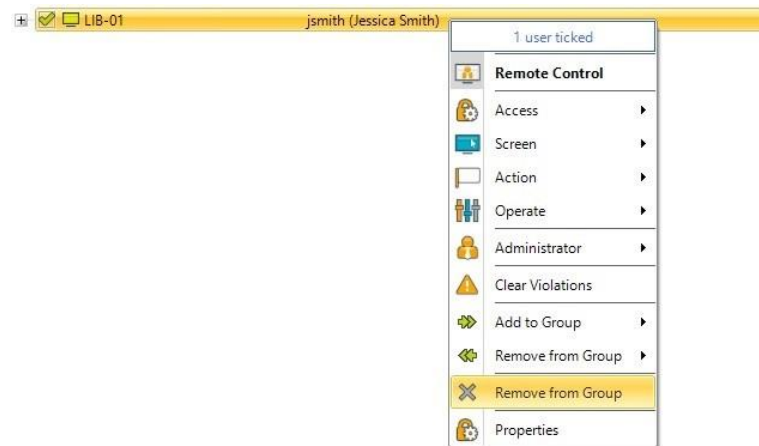


Image 10.2 - Remove from group

- Click on 'Yes' when asked if you are sure you wish to remove the user from the group

1.6 Violations

Any time a user attempts to access a resource that you have blocked or monitored using Impero, a 'violation' is generated. These violations are displayed in the 'Computer List View' so that you are able to easily identify which users have strayed off course.

- When a user attempts to access a resource that you have blocked, you are first notified via a pop-up in the corner of your window (Image 11).



Image 11 - Violation Alert

- The user is then highlighted in the 'Computer List View' as having generated a violation (Image 11.1).

<div> ✓ ✗ 🔍 🔧 🔗 🔒 🔑 </div> <div>Search</div>		
Computer	User	Violations
<div> + 🔒 LIB-01 </div>	jsmith (Jessica Smith)	<u>3 violations (3 new)</u>

Image 11.1 - Violations

- Click on the + icon to the left of the computer name to expand the list, where you can see the violations in more detail (Image 11.2).

Computer

User

Violations

LIB-01

jsmith (Jessica Smith)

3 violations (3 new)

Active Windows

Recent History

Violations (3)

Time

Policy

Trigger

Type

Description

Severity

Screenshot

Video

Status

Notes

17:08:22

<Entire Network Block List>

facebook

URL

Block for Social Media website Facebook

Minor

YES

NO

Unclassified

17:08:35

<Entire Network Block List>

control panel

Window Caption

Minor

YES

NO

Unclassified

17:08:42

<Entire Network Block List>

calc

Application

Minor

YES

NO

Unclassified

Properties

Image 11.2 - User Violations

- Hover over the violation in this list in order to view any screenshot that was captured when the violation was triggered (Image11.3).

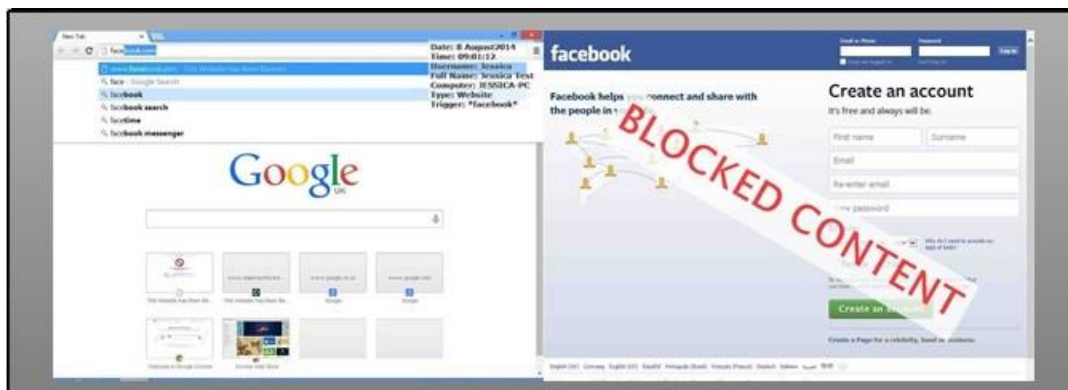


Image 11.3 - Violation Screenshot

Note: Website violation screenshots displays the content of the webpage that the user was trying to visit - the user is unable to see this content on their screen.

- There are a number of columns shown here displaying information regarding the violation capture:

Time

The time at which the user generated this violation.

Policy The name of the policy that detected the violation.

Trigger

Details of what was detected to cause the violation.

Type

What kind of policy caused this violation, i.e., website block (URL), window block (Window Caption) or application block.

Description

The 'Reason for this block', if one has been entered in the policy that generated this block.

Severity

The severity applied to this violation when created in the policy.

Screenshot

Whether or not a screenshot was taken when this violation was generated.

Video

Whether or not a video recording was taken when this violation was generated.

Status

The status of this violation; the status field can be updated by right-clicking on the violation.

Notes

This field populates with details of the user that first viewed this violation. Further notes can be added by right-clicking on the violation.

You can right-click on any violation in this list to perform further action (Image 11.4).

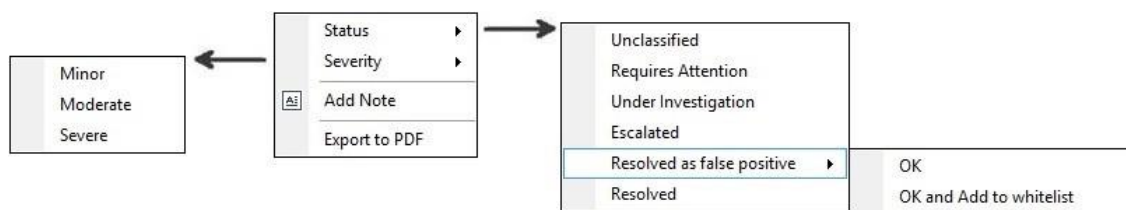


Image 11.4 - Violation Options

Status

Change the status of this violation to any of the default options that appear in this menu. The option to 'OK and Add to whitelist' adds this violation term to the group whitelist, meaning that the term no longer generates any violations.

Severity

Change the severity of this violation to Minor, Moderate or Severe.

Add Note

Add a note to this violation entry. Your note is viewable by other Impero Console users.

Export to PDF

Export the details of this violation to a PDF file.

Any violation that you see in this list is stored within the [Log Viewer](#).

2 Toolbars

The main toolbar icons are actually quick links to corresponding pop-up toolbars (Image 12). If you would like the toolbars to stay visible then double click on any icon in the main toolbar.

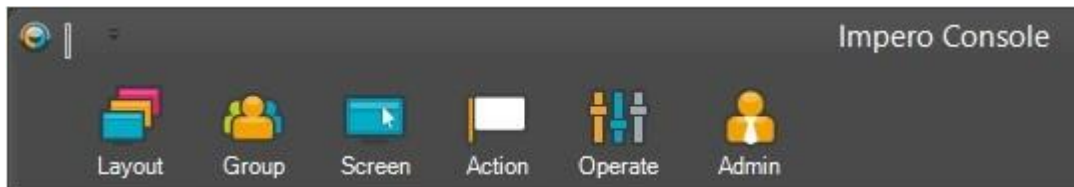


Image 12 - Main Toolbar

2.1 Layout Toolbar

The 'Layout' toolbar (Image 13) allows you to switch between the 'Basic/Advanced', 'Computer List', 'Live Thumbnails' and 'Room Layout' views.

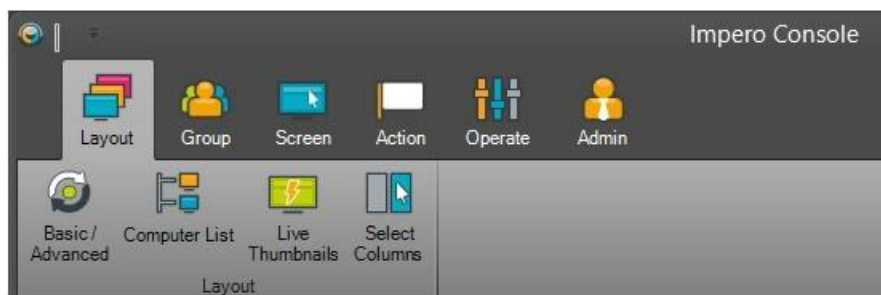


Image 13 - Layout Toolbar

Clicking on 'Basic/Advanced' switches your Impero Console to a simplified view containing a small number of more commonly used tools (Image 13.1).

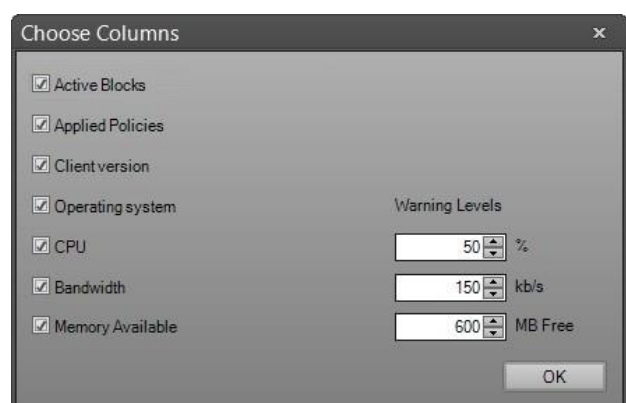


Image 13.1 - Basic Console

Simply click back on the 'Basic/Advanced' button again in order to switch back to the regular 'Advanced' view.

The 'Select Columns' icon allows you to turn on or off additional display columns in the 'Computer List' view. To turn on or off additional columns click on the 'Layout' toolbar and then 'Select Columns'. This opens the 'Choose Column' dialogue box (Image 13.2).

Active Blocks: Displays an icon for any Group blocks that are currently applied.



- Applied Policies:** Displays a link that shows you how many policies are currently enabled on the computer/user.
- Client Version:** Displays the current version of the Impero client.
- Operating System:** Displays the current Operating System.
- CPU:** Displays the current level of CPU use.
- Bandwidth:** Displays the amount of bandwidth being used.
- Memory Available:** Displays available memory.
- Warning Levels:** Displays in red once they have been reached by a particular computer (Image 13.3).
- Note:** Additional columns refresh every 10 seconds.

Image 13.2 - Select Columns

Computer	User	Violations	Active Blocks	Applied Policies	Version	OS	CPU	Bandwidth	Memory Available
IT01-02	bmatthews (Bill Matthews)	3 violations (3 new)		3 applied policies	5105	Windows 7	0 %	0.00 KBs / 0.00 KBs	43 MB
impero - Chromebook	impero (impero@gmail.com)			2 applied policies	4000	ChromeOS	0 %	0 KBs / 0 KBs	0 MB
LIB-01	jsmith (Jessica Smith)	1 violations (1 new)		3 applied policies	5105	Windows 8	0 %	26.00 KBs / 606.00 KBs	143 MB
IT01-01	sjones (Steve Jones)			3 applied policies	5105	Windows 7	2 %	0.00 KBs / 0.00 KBs	132 MB
WIN-853TJ1A6B8K	Administrator (Admin)			2 applied policies	5105	Windows Server 2012	50 %	0.00 KBs / 0.00 KBs	850 MB
NPTZ-CKGE (Offline)	iPad (Apple iPad Viewer)			2 applied policies	4213	IOSX	0 %	0 KBs / 0 KBs	0 MB

Image 13.3 - Display Columns

Active Blocks



The 'Active Blocks' column displays an icon for any block that has been applied to the computer/user via the Group toolbar: 'Lock Group' is currently active on this computer.



'Lock Internet' is currently active on this computer.



'Disable Printer' is currently active on this computer.



'Mute Sound' is currently active on this computer.



'Disable USB Storage' is currently active on this computer.

Applied Policies

The 'Applied Policies' column displays how many custom policies are currently enabled on the computer/user. You can then click on the link to view a list of the policies that are currently applied to the selected computer/user (Image 13.4).

Note: This list does not include any of the default group policy items.

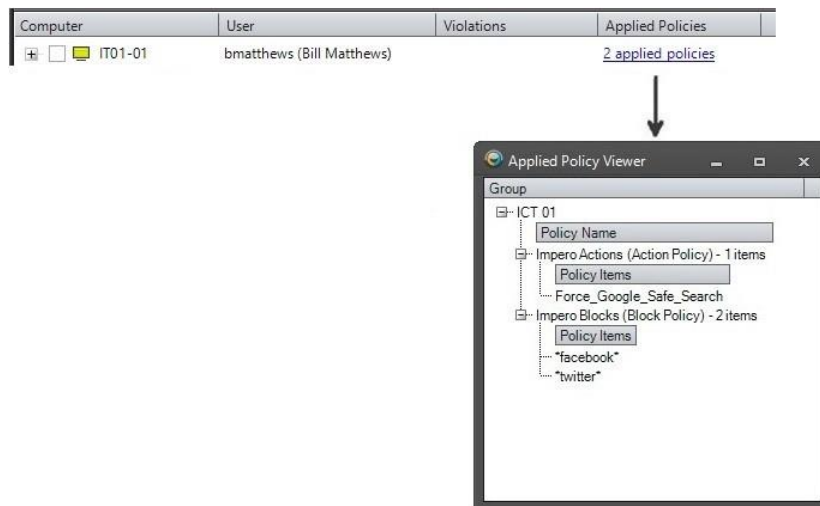


Image 13.4 - Applied Policies

2.2 Group Toolbar

The 'Group' toolbar (Image 14) allows you to quickly lock screens, disable Internet access, disable printing, mute sound and disable USB storage devices on all computers in your selected group. All the actions within this toolbar are performed on all members of the selected group, regardless of user selection. You are able to perform these actions on individual users by using the [default Impero groups](#).

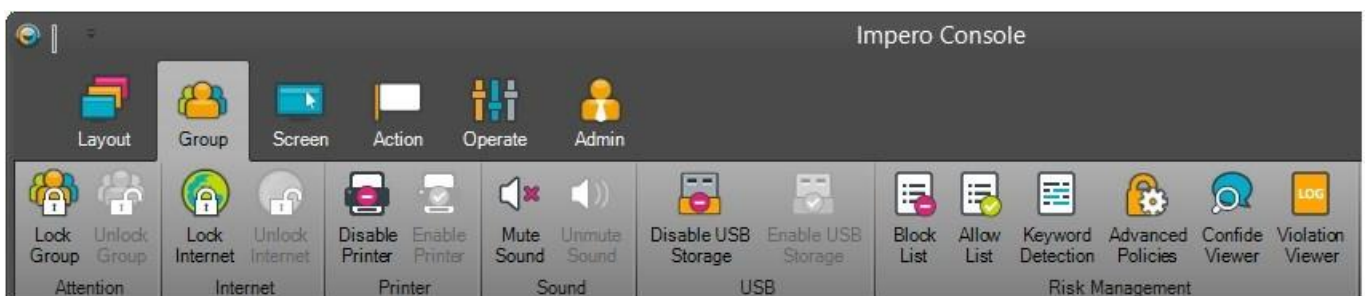


Image 14 - Group Toolbar

Lock Group

- Ensure the correct group is selected on the left-hand side of the Console.
- Click on the 'Group' toolbar.
- Select 'Lock Group'.
- The screens of every computer within the group is now locked (Image 14.1).



Image 14.1 - Locked Screen

- Users are unable to use the computers again until you click on 'Unlock Group'.

Note: You can modify the lock screen image and text to something of your own branding. This can be configured in the Impero Server.

Lock Internet

- Ensure the correct group is selected on the left-hand side of the Console.
- Click on the 'Group' toolbar.
- Select 'Lock Internet'.
- Internet browsing is then blocked for all users in the selected group (Image 14.2).



Image 14.2 - Internet Disabled

- Users are unable to use the Internet again until you click on the 'Unlock Internet' option.

Disable Printer

- Ensure the correct group is selected on the left-hand side of the Console.
- Click on the 'Group' toolbar.
- Select 'Disable Printer'.
- Users in the selected group no longer can print any documents (Image 14.3).



Image 14.3 - Printing Disabled

- Users are unable to print anything until you click on 'Enable Printer'. Mute Sound
- Ensure the correct group is selected on the left-hand side of the Console.
- Click on the 'Group' toolbar.
- Select 'Mute Sound'.
- All the users in the selected group have the sound muted on their computer.
- The sound continues to be muted until you click on the 'Unmute Sound' button.

Note: If you muted the sound for the group and then turned off some of the computers before you clicked on 'Unmute Sound', it is necessary that you 'Mute Sound' again and then 'Unmute Sound' immediately once all of the computers are powered back on.

Disable USB Storage

- Ensure the correct group is selected on the left-hand side of the Console.
- Click on the 'Group' toolbar.
- Select 'Disable USB Storage'.
- The users in the selected group are unable to access any files from USB devices (Image 14.4).



Image 14.4 - USB Storage Disabled

- Users remain unable to access any files until you click on 'Enable USB Storage'.

2.2.1 Block List

This feature gives you a quick access window to build basic blocks to stop everyone in your selected group from using a particular resource (Image 15). These blocks affect all

members of whichever group you currently have selected in the Impero Console. Select 'Block List' from the 'Group' toolbar.

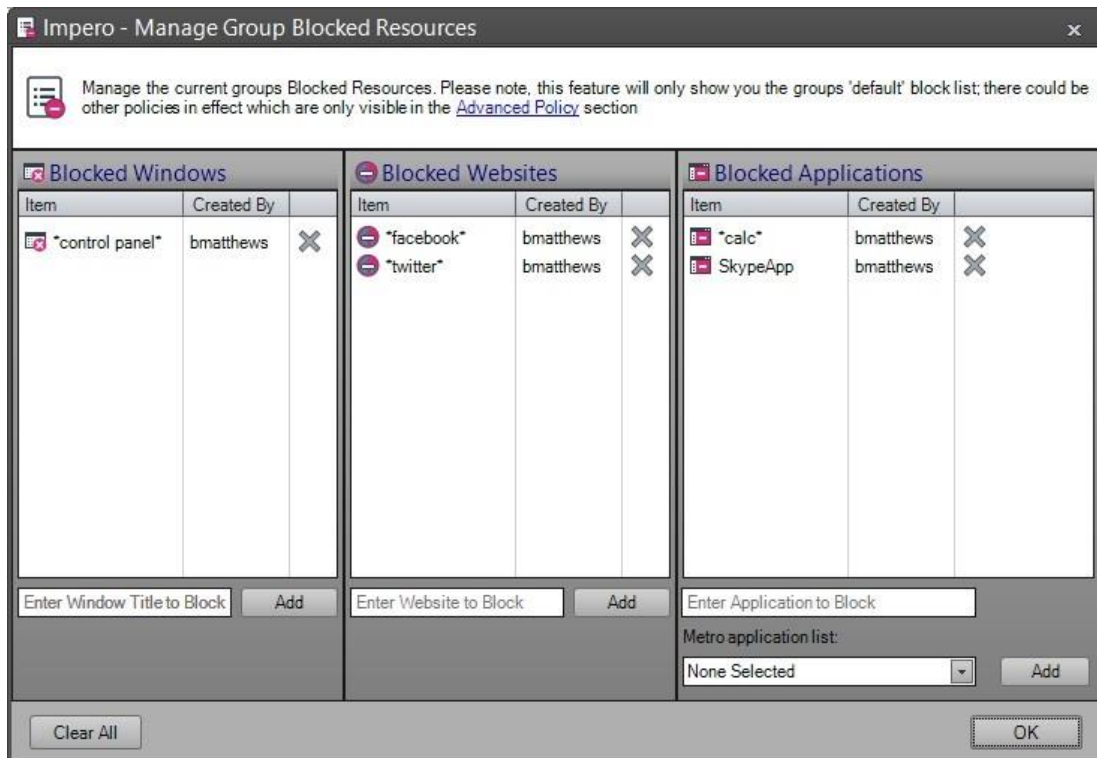


Image 15 - Block List

Blocked Windows

Enter the window caption that you would like to block. For example, enter 'control panel' and this would stop users from opening the Windows Control Panel. Impero inserts the wildcard symbol (*) before and after the caption once you click on the 'Add' button. This means that if any text appears before or after the phrase, it still blocks it. For example, *control panel* blocks any window with the phrase 'control panel' in the window caption area. This would include 'Control Panel', 'Start Control Panel' but not 'Control Start Panel'.

Blocked Website

Enter any websites that you would like blocked for your group. To block 'facebook.com', type 'facebook' and then click on the 'Add' button. Impero inserts the wildcard symbol (*) before and after the word 'facebook' for you. This blocks all web addresses with the word 'facebook' in the address bar. For further information on website filtering, please see ['Browser Extensions'](#).

Blocked Applications

Enter the name of any program you wish to block for your group. To block the calculator, type 'calc' and click on the 'Add' button. Impero inserts the wildcard symbol (*) for you at the beginning and ending of the word 'calc'. Any application with the word 'calc' in the application name is now blocked.

Hint: An easy way to find the name of an application you are trying to block would be to find the icon for the program, right mouse click on top of it and select 'properties'. In the target box you should see the application name usually ending in .exe.

You are also able to block Windows 8 'Metro' applications via the drop-down list in the bottom right-hand corner of the window. Select from the drop-down list which Metro application you wish to block and click on 'Add'. This adds the Metro application to the 'Blocked Applications' panel.

Users are unable to access any of the resources you have blocked. If any user does try and access a blocked resource, Impero generates a 'Violation' and take a screenshot of the user screen when this violation is triggered.

The 'Clear All' button in the bottom left of the window removes all Blocked Windows, Websites and Applications from the policies displayed in that window. In order to remove single Windows, Websites or Applications from the policy, click on the 'X' to the right of that specific block (Image 15.1).



Image 15.1 - Remove Blocks

2.2.2 Allow List

The 'Allow List' feature allows you to specify websites are allowed to run, while all unspecified websites are blocked.

If the Allow List is empty (Image 16) then all sites are allowed to display correctly. Once you add a website to the Allow List all other websites are blocked (Image 16.1). Only the websites on the Allow List is displayed correctly and the others receives an error message saying, 'The website you tried to access is not on the Allowed List'.

To add a website to the Allow List:

- Click on the 'Group' icon, then 'Allow List'.
- Enter the website at the bottom of the dialogue box and click on 'Add'. - Repeat above step if additional websites are needed.

To allow full access to all websites again, click on the 'Groups' icon, then 'Allow List', and click on 'Clear All' in the bottom left of the window to remove all entries. In order to remove single entries from the Allow-Only Websites, click on the 'X' to the right of any website address you have in the blocked window (Image 16.1).

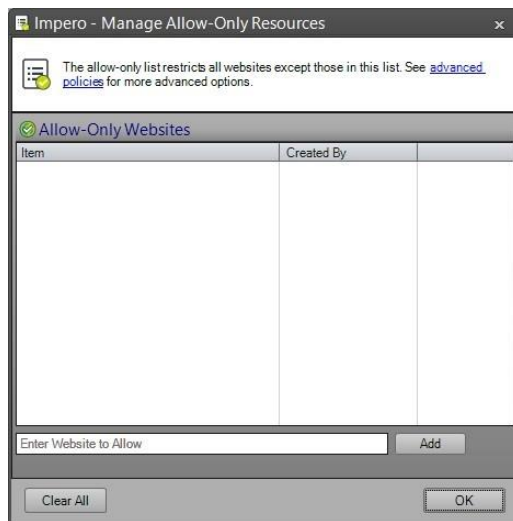


Image 16 - Allow List

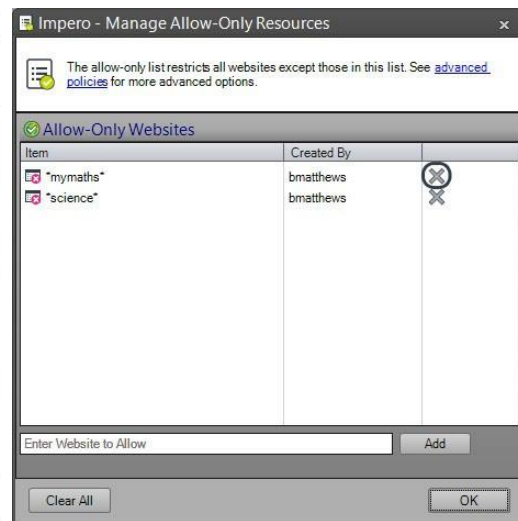


Image 16.1 - Populated Allow List

2.2.3 Keyword Detection

This feature allows for you to be notified when a user types a word or phrase that has been added to the 'Keyword Detection' window (Image 17). For example, I would like to know when a user types the word 'proxy'.

- To create this detection, click on the 'Group' icon and then click on the 'Keyword Detection' icon.
- In the 'Keyword Detection' window type 'proxy' and click on the 'Add' button.
- Impero automatically inserts the wildcard symbol (*) before and after the word 'proxy'. - This detects anything the user types with the word 'proxy' within in.
- When a user types the word 'proxy', you are alerted by a notification on your screen (Image 17.1).

- Impero also generates a violation and take a screenshot of the user screen when this is triggered. The user is unaware of this and can continue to work as normal.

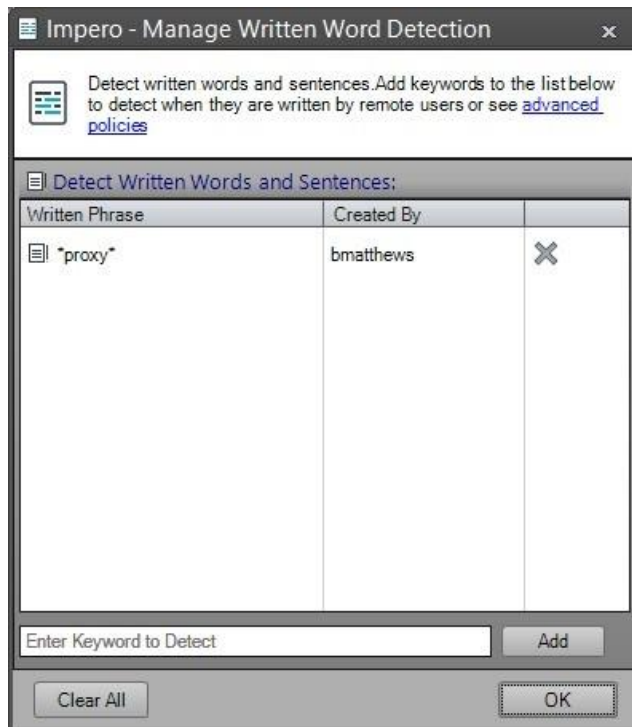


Image 17 - Keyword Detection Window



Image 17.1 - Console Alert

In order to remove entries from the Keyword Detection policy, either click on the 'Clear All' button in the bottom left to remove all entries or click on the 'X' to the right of each keyword to remove single entries.

2.2.4 Advanced Policies

The Impero console has an 'Advanced Policy' system which allows you to set up various policies that affects end-users. These policies can be set on every Impero Client machine by configuring Advanced Policies on the 'Entire Network' group, or on specific groups that you created in the Impero.

- To access Advanced Policies, firstly ensure that you have the correct group selected in your Console.
- Click on 'Group' and then select 'Advanced Policies'.
- You can also select this by right-clicking your mouse on the correct group and selecting 'Advanced Policies'.

Note: You cannot create Advanced Policies for the default Impero Groups (i.e., Internet Banned, Printing Disabled, Removable Media Disabled, Screens Locked, Sound Muted).

- You now see the 'Advanced Policy System' window (Image 18) where your policies can be created, edited, and scheduled.

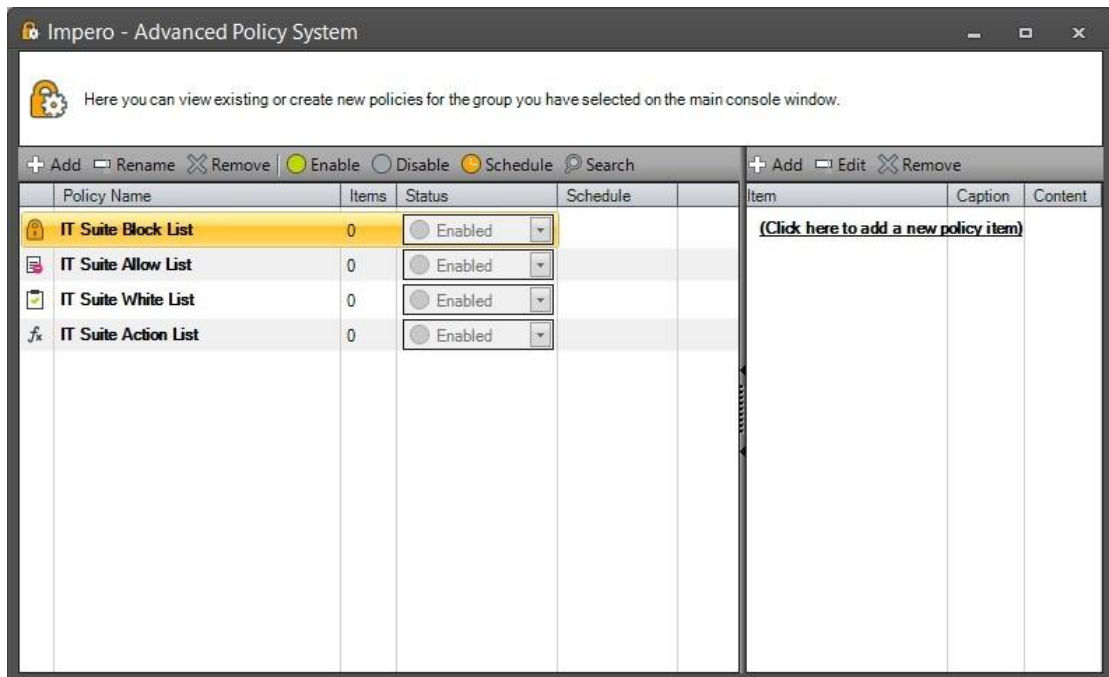


Image 18 - Advanced Policy System

Note: If you also see a number of other policies in this window, i.e., 'GAMBLING', 'HACKING' etc, these can be ignored as they are now redundant. If you have any questions about this, please see the 'Block/Detect' section or contact [Impero Support](#).

- Every group has four default policies that appear in bold at the top of this window. Any entries in the Block List, Allow List and Keyword Detection windows are displayed in these policies.
- You can also add items to each of these default policies.
- Group default policies are permanently 'Enabled' and cannot be disabled.
- If a policy contains any items, they are displayed on the right-hand side of this window.

- In order to create your own policies, click on the 'Add' button in the upper left-hand corner of this window. This opens the 'Create New Policy' window (Image 18.1).

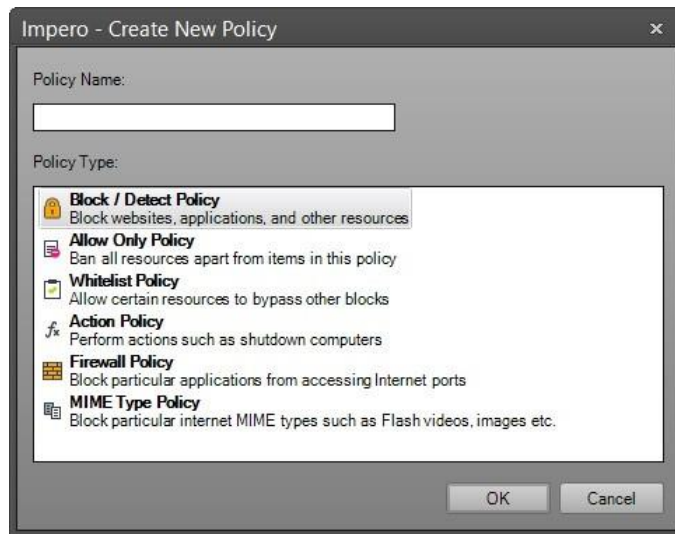


Image 18.1 – Create New Policy

- Enter a name for your new policy in the 'Policy Name' text area at the top of the window. You are then presented with six different policy types that you can create:



Block/Detect Policy – Detect/block a website, application or other resource launched from the remote computer



Allow Only Policy – This bans all resources apart from the items named in this policy



Whitelist Policy – Allow certain resources to be launched on the remote computer, bypassing other blocks/policies



Action Policy – Perform actions on remote computers, such as shut down



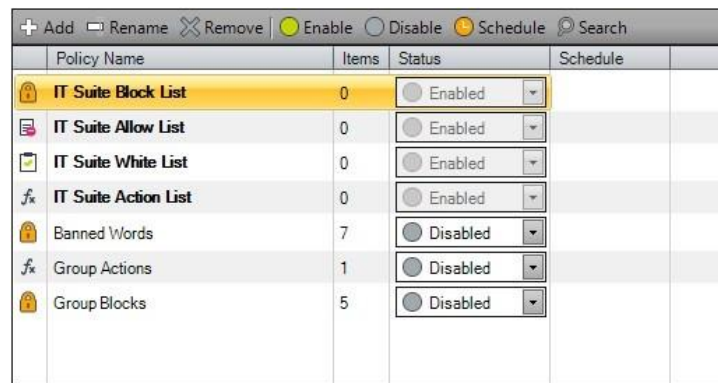
Firewall Policy – Block applications from accessing Internet ports



MIME Type Policy – Block online MIME types, for example Flash Videos, images or other such items

- Once you have given your policy a name and selected the policy type, click on 'OK'.
- Your new policy is then displayed on the left-hand side of the 'Advanced Policy System' window. Details on how to set up each policy type can be found in the following sections.

- Once you have set up some policies (Image 18.2), there are several further options that are configurable from the left-hand side of this window.



Policy Name	Items	Status	Schedule
IT Suite Block List	0	Enabled	
IT Suite Allow List	0	Enabled	
IT Suite White List	0	Enabled	
IT Suite Action List	0	Enabled	
Banned Words	7	Disabled	
Group Actions	1	Disabled	
Group Blocks	5	Disabled	

Image 18.2 – Advanced Policies

- Select one of your policies on the left-hand side and click on 'Rename' in order to edit the name of your policy.
- Select one of your policies and click on 'Remove' in order to delete your policy.
- If you wish to start using one of your policies, select it and click on 'Enable'. You can also do this by selecting 'Enabled' from the drop-down list in the 'Status' column.
- If you wish to stop using a policy that is already enabled, select it and click on the 'Disable' button or select 'Disabled' from the 'Status' drop-down list.
- You can set a policy to run between certain times by scheduling it. To do this, select your policy and click the 'Schedule' button or select 'Scheduled' from the drop-down list.
- You then see a new button, 'New Schedule' next to that policy item.
- Click on this button to specify the times during which this policy are active (Image 18.3).

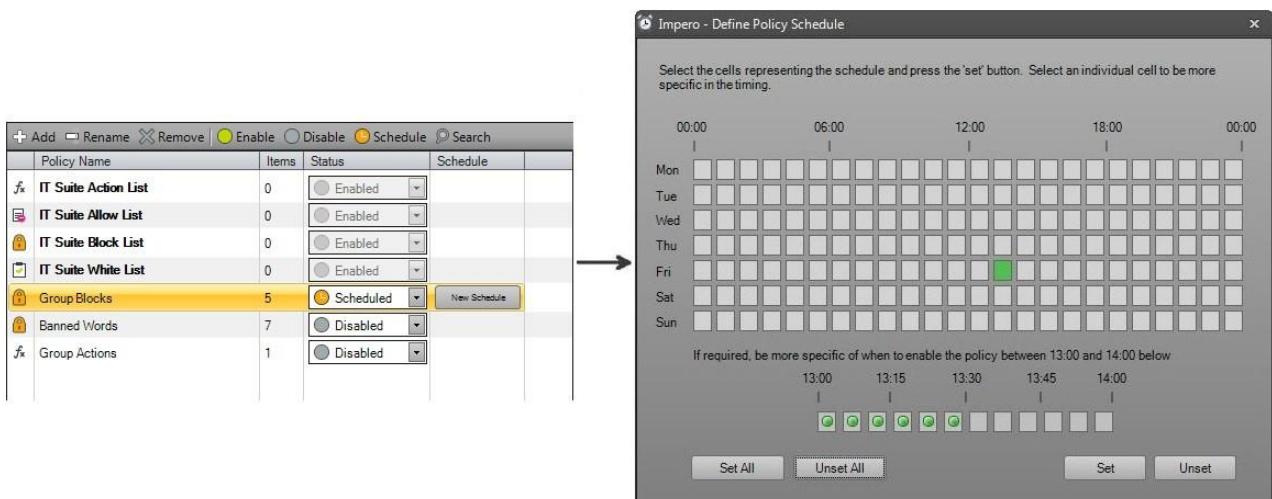


Image 18.3 – Define Policy Schedule

The policy schedule (Image 18.4) is broken down by each day of the week, with each day having 24 blocks representing each hour of the day. In order to schedule the policy, click on the hours during which you wish for the policy to become active.

When an hourly block is clicked upon, the block turns to a solid green colour, indicating the policy is enabled for that hour. You can click on as many hours, on as many days, as you wish for the policy to run.

You can also break down the schedule even further into specific 5 minute blocks. If you click on just one singular hour block in the schedule, an additional option is displayed below it. This option is comprised of 12 additional blocks representing 5 minute blocks within the selected hour. Clicking on these blocks puts a green dot inside it, displaying that the policy is active for that 5 minute period. In the example in Image 18.2, the policy is set to be scheduled from 13:00 to 13:30 every Friday.

If you broke down one of the hours into specific smaller time periods, and set that schedule, the hour block within which that time period falls changes into a red dot icon.

Once you are happy with the schedule you have created, click on the 'Set' button to activate it. The 'Unset' button removes the schedule. The two additional buttons, 'Set All' and 'Unset All', selects/deselects all the blocks in the schedule.

Hint: You can use the 'Copy Command' to copy one schedule block to multiple other blocks. For example, if you have scheduled a policy to begin at 6:30am on Monday and wish to set the same schedule to start Tuesday – Friday, simply click on the Monday schedule block and drag your cursor downwards onto the same block on Tuesday – Friday, then click on 'Set'. Those blocks are then also populated by the red dot icon as the 6:30am schedule copied into them.

- If you wish to locate a particular policy term, click on the 'Search' button.
- This opens a new window, where you can enter the term that you wish to locate, using the asterisk (*) as a wildcard if necessary (Image 18.4).
- This searches only on any enabled 'Block/Detect' type policy.

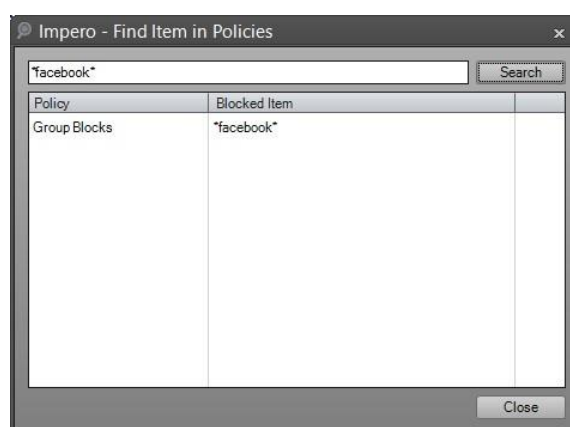


Image 18.4 – Policy Search

- You can right-click on any of the entries in the 'Policy Name' to either Export or Import the items in that policy (Image 18.5).

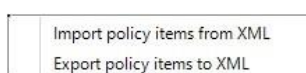
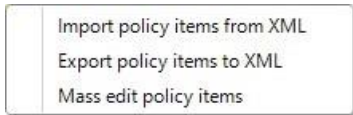


Image 18.5 – Import/Export to XML

- If you right-click on a Block/Detect Policy, you have the additional option of ‘Mass edit policy items’ (Image 18.3). – This allows you to modify multiple policy items with one click.



- For further information, please see the [Mass Policy Editor](#) section.

Note: If you create an Advanced Policy in one Computer/User Group, it is mimicked across all other Computer/ User Groups. For example, if the Policy is created in ‘Computer Group A’, the same policy are then displayed for ‘Computer Group B’, ‘User Group A’ and ‘User Group B’. However, if the policy is then ‘Enabled’ or ‘Scheduled’ in ‘Computer Group A’, it remains ‘Disabled’ in the other Groups. Only the Policy Name and Policy Items are carried across into the other Groups, not the scheduling information. If you wish to create policy items specific to a Computer/User Group, enter those items into the default policies that are created per group, i.e., ‘Group Name Action List’, ‘Group Name Block List’ etc.

Image 18.3 – Mass Edit Policy Items
Advanced Policy Options

2.2.4.1.1 Block/Detect Policy

The ‘Block/Detect’ policy type allows you to set up blocks for windows, website and applications, as well as create actions to take place when these resources are accessed.

- In the ‘Policy Name’ field, enter a name for the policy you are about to create.
- Ensure the ‘Block/Detect Policy’ is selected and click on ‘OK’.
- The policy name you entered is then displayed in the list on the left-hand side of this window (Image 19).
- Click on the policy name to select it.

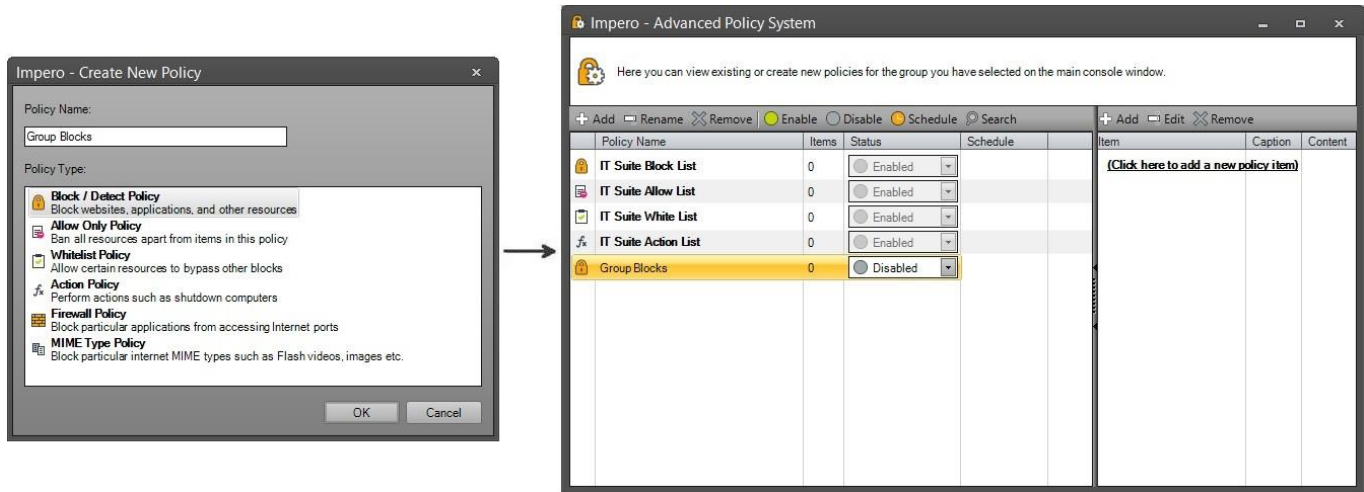


Image 19 – Create Block/Detect Policy

- With your policy selected, click on the 'Add' button that appears on the right-hand side of the window. – This opens the 'Add/Edit Policy Item' window (Image 19.1).

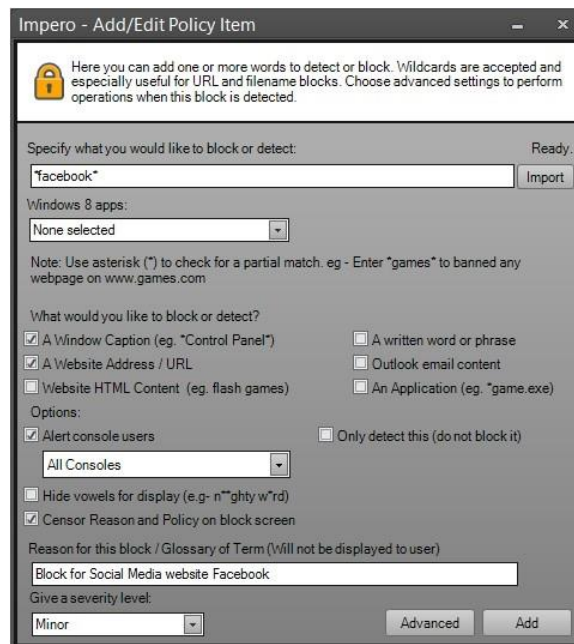


Image 19.1 – Add/Edit Policy Item

- From this window you can configure what you wish to block, and the actions you wish to perform when detecting the block, by going through the various fields:

[1] Specify what you would like to block or detect

Type in the word or phrase that you wish to detect. Entering an asterisk (*) before or after the search word/phrase acts as a wildcard.

[2] Metro application list

Use this option if you wish to block a Windows 8 Metro application. Choose which you wish to block from the list of Metro applications; then it is not required of you to set options [1] or [4].

[3] Import

You can create a list of keywords to add to a policy in advance and import it into the policy.

[4] What would you like to block or detect?

Select from the six options where you wish to detect the term you have entered [1]

A Window Caption – Verifies the window caption/application title bars.

A Website Address/URL – Checks the Internet web address.

Website HTML Content – Analyse the HTML content of a website.

A written word or phrase – Detect the word/phrase within written text that the user types into any application.

Outlook email content – Detect a specific word within emails viewed in Microsoft Outlook.

An Application – Find the word/phrase within an application filename or within the path to the application executable.

[5] Options

The action to be carried out when the word/phrase has been detected:

Alert console users

An alert pops-up on the selected group of console users.

Only detect this

This logs the violation but not perform any actions on the user.

Hide vowels for display

If the specified word/phrase has been detected on the remote computer, the violation notification on the user screen hides all vowels to mask any expletives.

Censor Reason and Policy on block screen

If the word/phrase is detected, censor the reason and policy to the user when the error is displayed (Image 19.2).

Reason for this block/Glossary of Term

You can specify in this field a reason for adding this block. This is not displayed to the user; only other Console users can see this field.



Image 19.2 – Censor Reason and Policy

Give a severity level

Assign a severity level to the violation from the list of options – Minor, Moderate or Severe.

- At this stage, once you have completed the above steps, your policy is ready to be used.
- By default, when a user tries to access the resources you blocked – a violation is generated, and a screenshot of their computer screen is taken and saved to the 'LogViewer'.
- Alternatively, click on the 'Advanced' button to edit the action to perform when a user accesses the blocked resource.

- This opens a new window (Image 19.3).

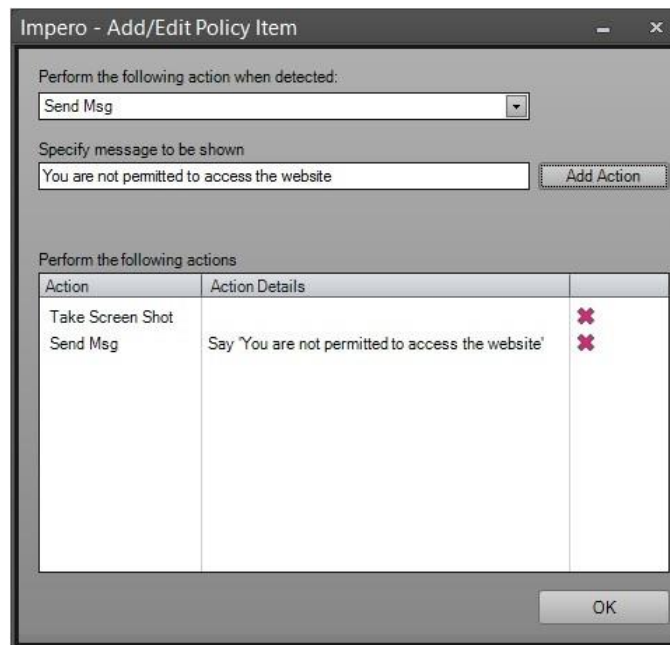


Image 19.3 – Advanced Actions

- By default, this window is populated with the 'Take Screen Shot' action.
- Select from the drop-down list any other action that you wish to perform when the blocked resource is accessed.
- Depending on your selection in the drop-down list, you can edit the secondary field to specify the action you wish to carry out. Click on the 'Add Action' button and then on 'OK' to set this action.
- Back on the 'Add/Edit Policy Item' window, click on the 'Add' button.
- Your policy item is then be added to your newly created 'Block/Detect' policy (Image 19.4).

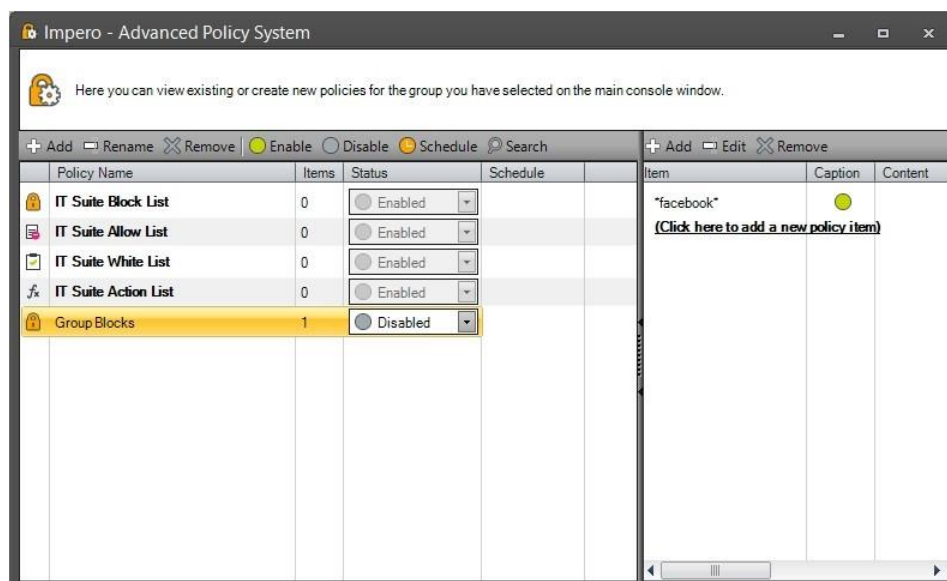


Image 19.4 – Added Block/Detect Policy Item

- By default, your new policy is set to 'Disabled'.
- Use the 'Status' drop-down list to set your policy to 'Enabled'.
- You can also set the policy to 'Scheduled', which allows you to set specific times during which this policy is active.
- Impero can provide you with several keyword detection libraries that can be imported as 'Block/Detect' policy items.

2.2.4.1.1 Impero Keyword Libraries

Impero can provide a number of keyword libraries that can be imported into your Advanced Policy system. There are nine libraries that are held in XML format files – Adult Content, Bullying and Trolling, Eating Disorders, Grooming, Homophobic Language, Racist Language, Self-harm, Sexting and Suicide.

Each library contains lists of words and phrases that are detected and generate a [violation](#) if and when typed in by any user on the network. Each word/phrase is assigned one of three severity levels – Minor, Moderate or Severe. When any minor or moderate violation is generated, Impero automatically takes a screenshot of the user screen. If a severe violation is generated, Impero still takes the screenshot but also captures a 30 second recording of the user screen. These screenshots and recordings can be found in your [Log Viewer](#).

Please note that a number of the severe violations are by default not set to alert users when triggered – it is necessary that you monitor the Log Viewer for these instances. The reason for this is so as not to potentially broadcast sensitive issues to large numbers of people. You can use the [Mass Policy Editor](#) feature to change this behaviour if you wish.

If you wish to use these keyword libraries, please contact [Impero Support](#) who makes these libraries available to you and assist you with the import. A [video tutorial](#) is also available if you wish to import these libraries yourself.

2.2.4.1.2 Allow Only Policy

The 'Allow Only' policy, much like the 'Allow List', allows you to specify one or more websites that are allowed while all other websites are blocked.

- In the 'Policy Name' field, enter a name for the policy you are about to create.
- Ensure the 'Allow Only Policy' is selected.

- The policy name you entered is then displayed in the list on the left-hand side of the window. Click on the policy name to select it.

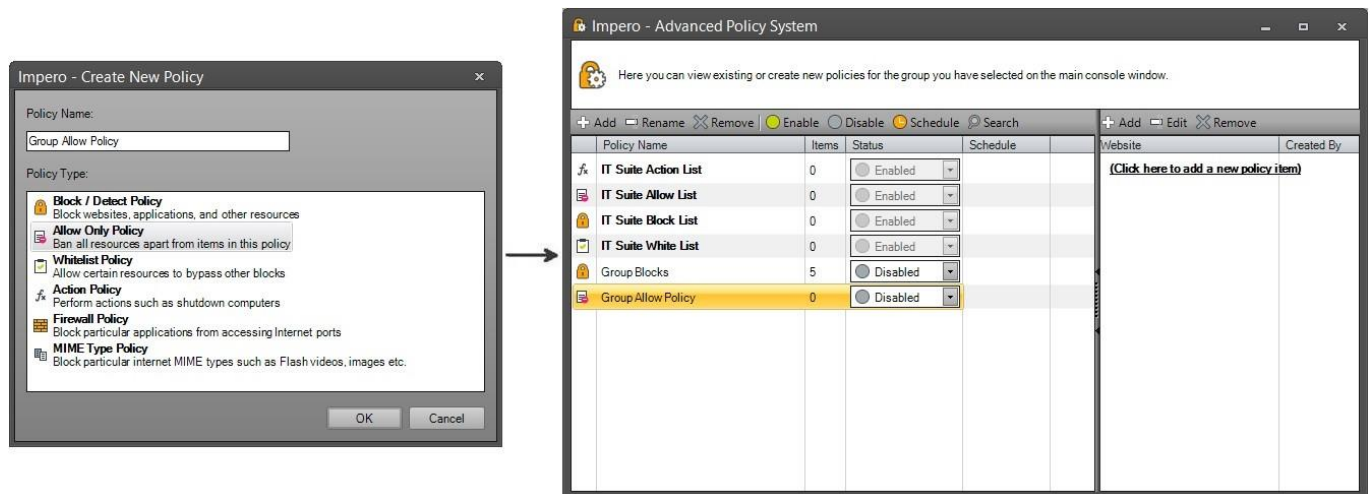


Image 20 - Create Allow Only Policy

- With your policy selected, click on the 'Add' button on the right-hand side of the window.
- This opens the 'Add/Edit Policy Item' window.
- Specify on the website(s) that you wish to make viewable for users (Image 20).



Image 20.1 - Advanced Policy - Allow Only Policy

- If an 'Allow Only' policy is active, any website not specified here is not accessible.
- You can add asterisks (*) before or after the term you enter to act as a wildcard, so that any address containing the term is allowed.
- You can also create the list in a text file and enter it using the 'Import' button.

- Once you have configured your policy, click on the 'Add' button.
- Your policy item is then added to your newly created 'Allow Only' policy.

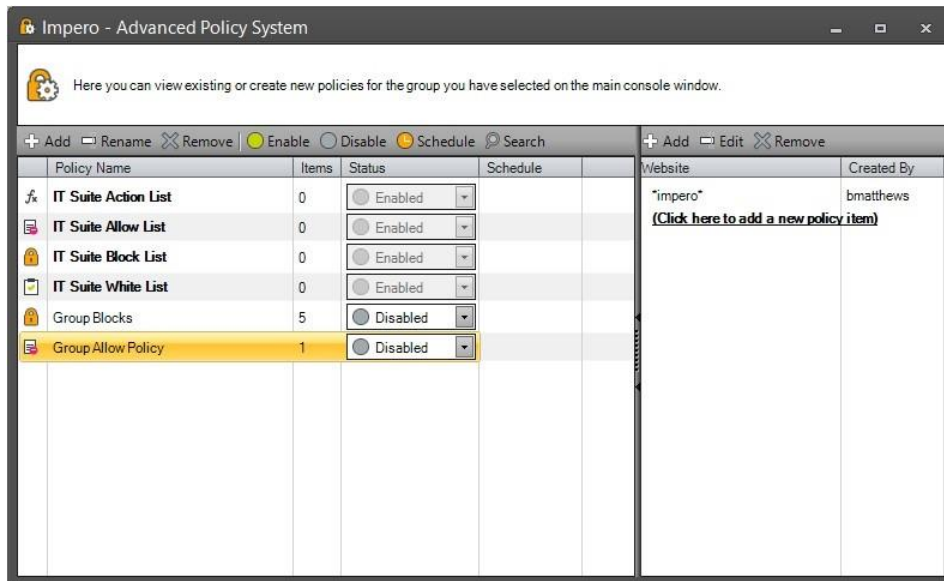


Image 20.2 - Added Allow Only Policy

- By default, your new policy is set to 'Disabled'.
- Use the 'Status' drop-down list in order to set your policy to 'Enabled'.
- You can also set the policy to 'Scheduled', which allows you to set specific times during which this policy is active.

2.2.4.1.3 Whitelist Policy

The 'White List Policy' allows you to set up resources that users are permitted to access, even if they are blocked in another policy elsewhere.

- In the 'Policy Name' field, enter a name for the policy you are about to create.
- Ensure the 'Whitelist Policy' is selected and click on 'OK'.
- The policy name you entered is then displayed in the list on the left-hand side of this window.

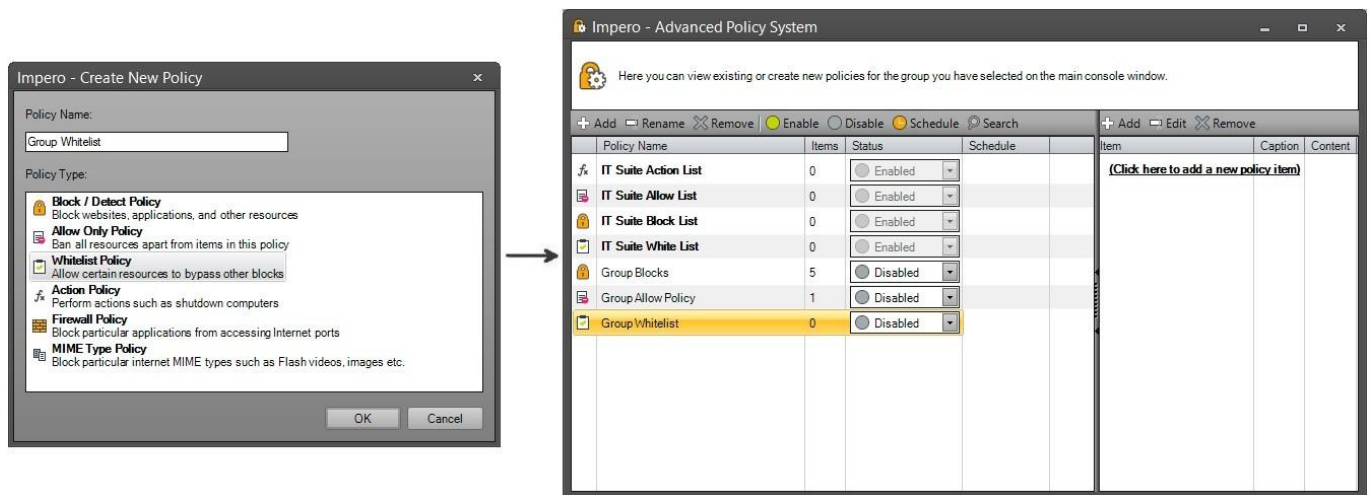


Image 21 - Create Whitelist Policy

- Click on the policy name to select it.
- With your policy selected, click on the 'Add' button that is displayed on the right-hand side of the window. - This opens the 'Add/Edit Policy Item' window (Image 21).

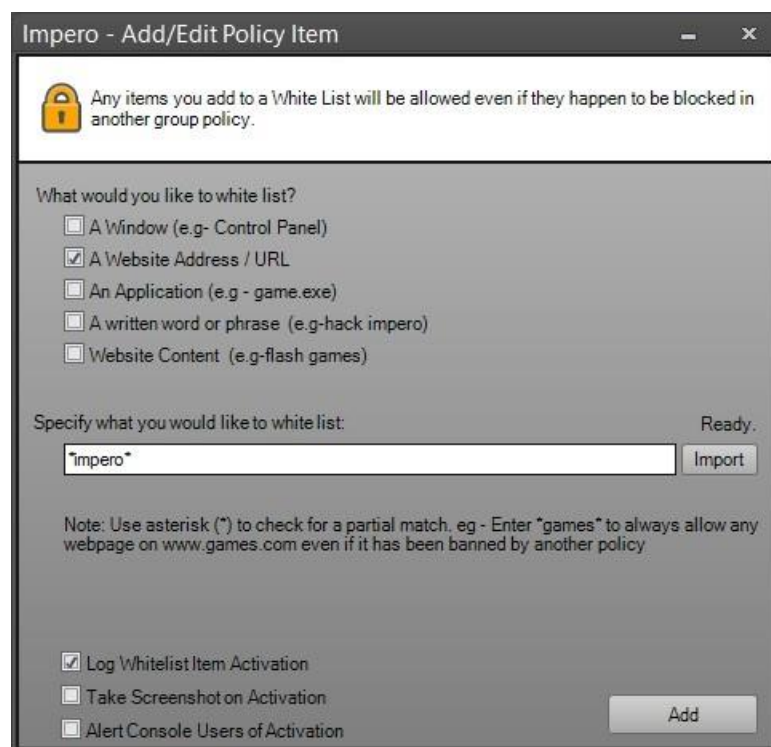


Image 21.1 - Advanced Policy - Whitelist Policy

- There are a number of options that you can configure in this window:

[1] What would you like to whitelist?

Select the application type that you wish to whitelist from the predefined list of options.

[2] Specify what you would like to whitelist?

Specify the word/phrase that you wish to whitelist. In this example 'A Website Address/URL' is being whitelisted, and the specific website is anything that contains the word 'impero'. You can use asterisks (*) to act as a wildcard.

[3] Import

You can create a list of keywords in advance to add to a policy and import them from a text file.

[4] Options

Log Whitelist Item Activation

When this whitelist item is activated, an entry is added into the LogViewer.

Take Screenshot on Activation

A screenshot is taken of the user screen when the whitelist item is activated.

Alert Console Users of Activation

An alert is displayed on the screen of console users to notify them when a whitelist item is activated.

- Once you have configured your policy, click on the 'Add' button.
- Your policy item is then added to your newly created 'White List' policy.

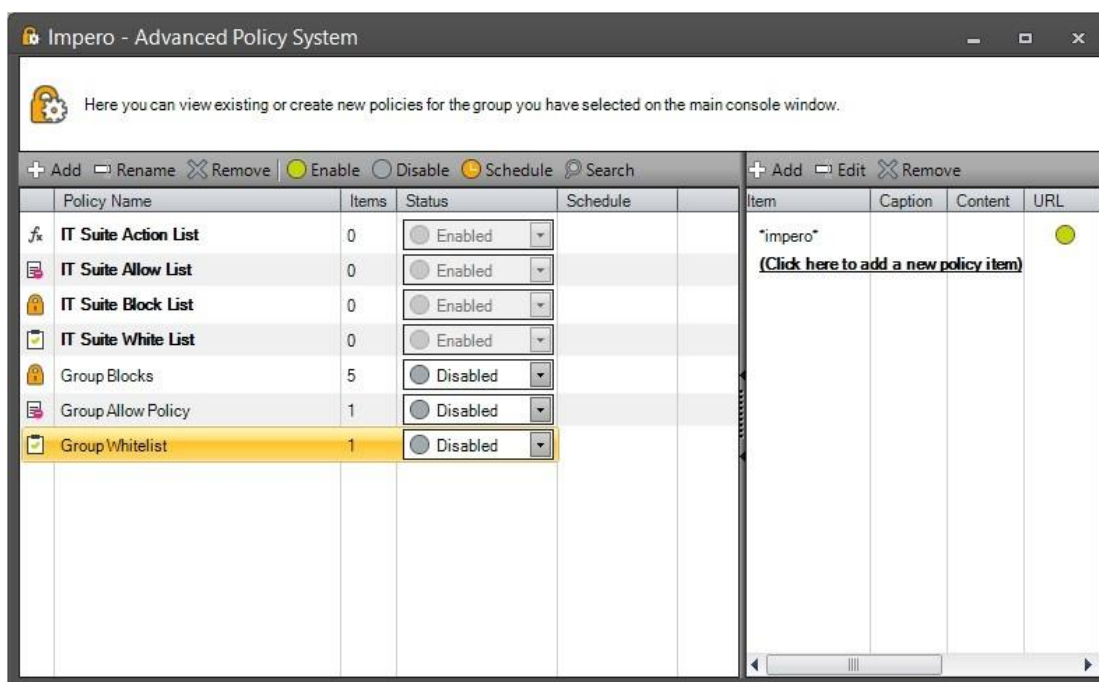


Image 21.2 - Added Whitelist Policy

- By default, your new policy is set to 'Disabled'.
- Use the 'Status' drop-down list in order to set your policy to 'Enabled'.
- You can also set the policy to 'Scheduled', which allows you to set specific times during which this policy is active.

2.2.4.1.4 Action Policy

The 'Action' policy allows you to perform a variety of options on your Impero environment, either continuously or on a schedule.

- In the 'Policy Name' field, enter a name for the policy you are about to create.
- Ensure the 'Action Policy' is selected.
- The policy name you entered is then displayed in the left-hand side of the window (Image 22).

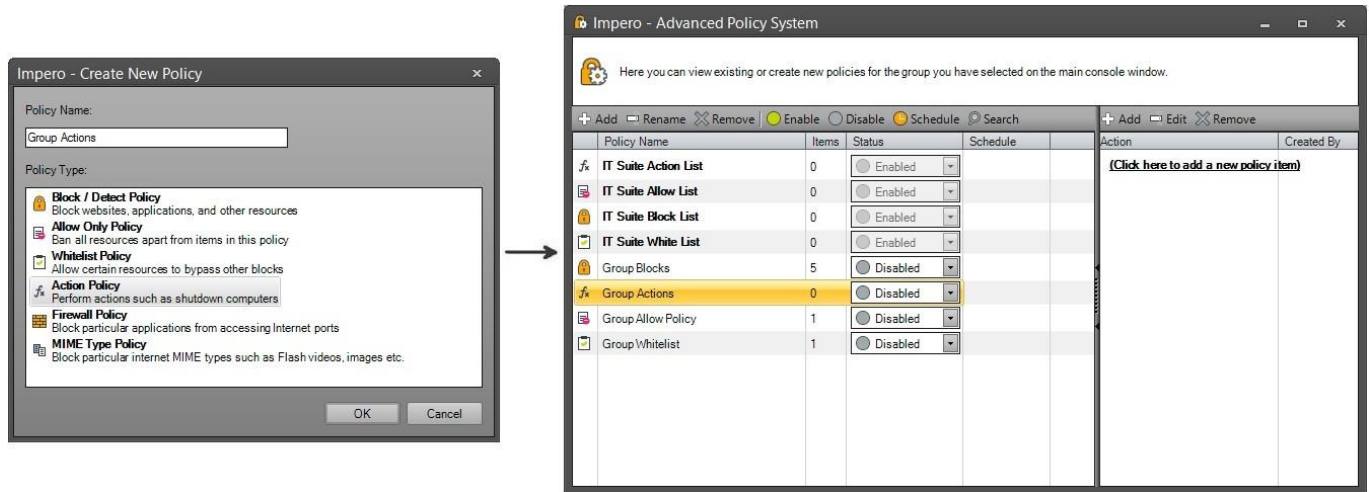


Image 22 - Create Action Policy

- Click on the policy name to select it.
- With your policy selected, click on the 'Add' button on the right-hand side of the window.
- This opens the 'Add/Edit Policy Item' window.
- Select from the drop-down list which action policy you wish to define (Image 22.1).
- You then see different options based on the selection that you made in the drop-down list.

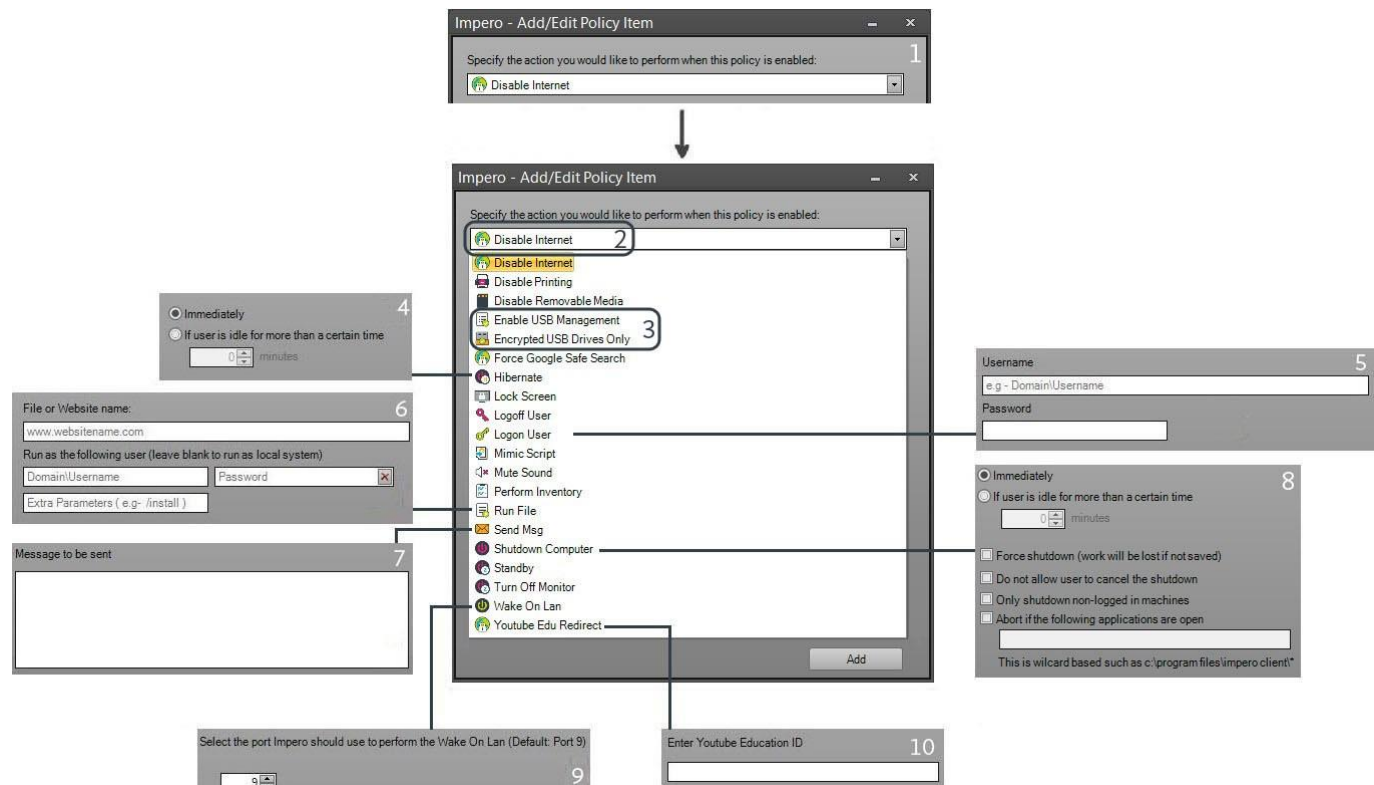


Image 22.1 - Advanced Policy - Action Policy

[1] Specify the action you would like to perform when this policy is enabled:
Select an option from the list that you wish to perform when the policy is enabled.

[2] The list of possible actions that you can carry out when the policy is enabled. Further options are presented in the current window depending on which action has been chosen.

[3] USB Management
For further information on these options, please see the [USB Tracking](#) section.

[4] Hibernate/Standby/Turn Off Monitor
Options to perform the action immediately or after a specified amount of idle time.

[5] Logon User
Enter the username and password to be used when logging on.

[6] Run File
Enter the filename or website name that you wish to run. Options to add a Username/Password or extra parameters.

[7] Send Msg
Type in the message that you wish to send when this policy takes effect.

[8] Shutdown Computer
You have the option to shutdown the computer immediately or after a specified amount of idle time. Further options allow you to force the computer to shut down, prevent the user from stopping the shutdown, or abort the shutdown process if a certain application is running.

[9] Wake On LAN
Select the port that Impero should use to perform Wake-On-LAN. This is pre-set to '9' which is the default Wake-On-LAN port.

[10] YouTube Edu Redirect
Enter your specific YouTube ID in order to force anyone browsing YouTube to view only allowed content.

- Once you have configured your policy, click on 'Add'.

- Your policy item is then added to your newly created 'Action' policy.

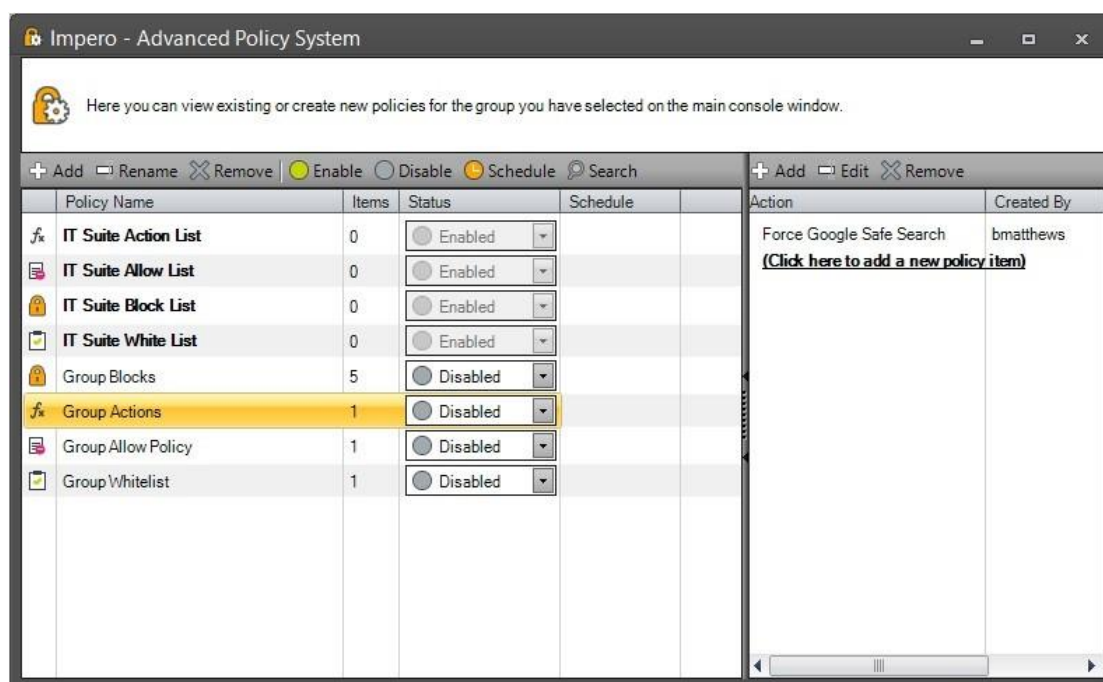


Image 22.2 Added Action Policy

- By default, your new policy is set to 'Disabled'.
- Use the 'Status' drop-down list in order to set your policy to 'Enabled'.
- You can also set the policy to 'Scheduled', which allows you to set specific times during which this policy is active.

2.2.4.1.5 Firewall Policy

The 'Firewall' policy allows you to block specific applications, Internet addresses or ports.

- In the 'Policy Name' field, enter a name for the policy you are about to create.
- Ensure the 'Firewall Policy' is selected.
- The policy name you entered is then displayed in the left-hand side of the window (Image 23).

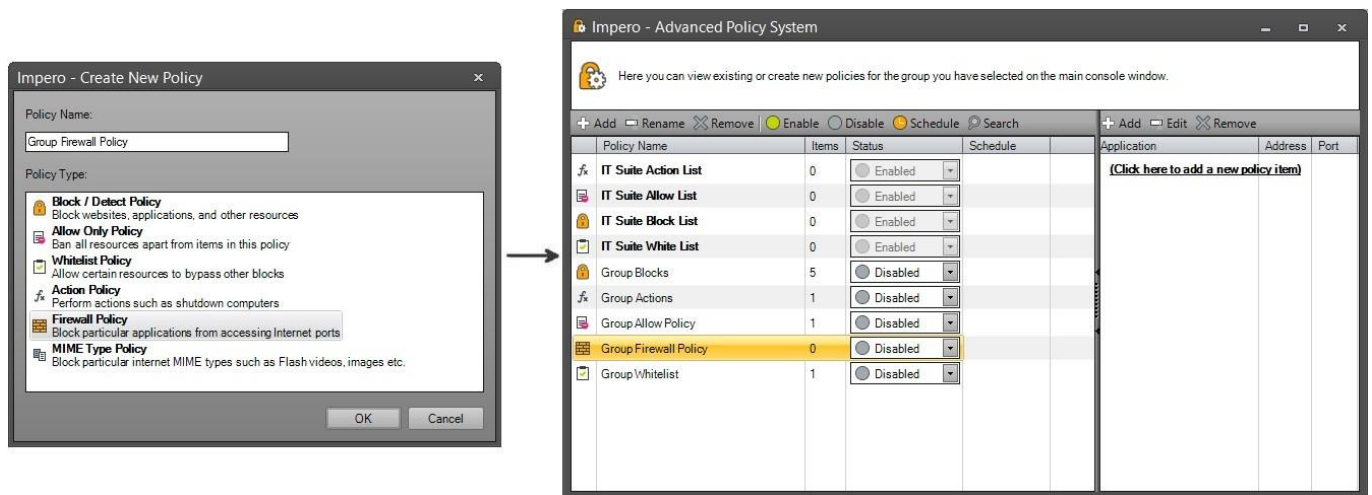


Image 23 - Create Firewall Policy

- Click on the policy name to select it.
- With your policy selected, click on the 'Add' button on the right-hand side of the window.
- This opens the 'Add/Edit Policy Item' window.
- There are three fields that you can populate here (Image 23.1).
- Each field is pre-populated with an example of the entries you can add here.

Image 23 - Advanced Policy - Firewall Policy

[1] Application Name

Enter into this field the name of the application that you wish to block access to, i.e. 'winword.exe' (Microsoft Word), 'calc.exe' (Calculator), 'chrome.exe' (Google Chrome). You can use asterisks (*) in this field to act as wildcards.

[2] Internet Address

Enter into this field specific Internet Addresses or IP Addresses that you wish to block access to. You can use asterisks (*) in this field to act as wildcards.

[3] Port

Enter into this field specific Ports that you wish to block access to. You can use asterisks (*) in this field to act as wildcards.

- Once you have configured your policy, click on 'Add'.
- Your policy item is then added to your newly created 'Firewall' policy.

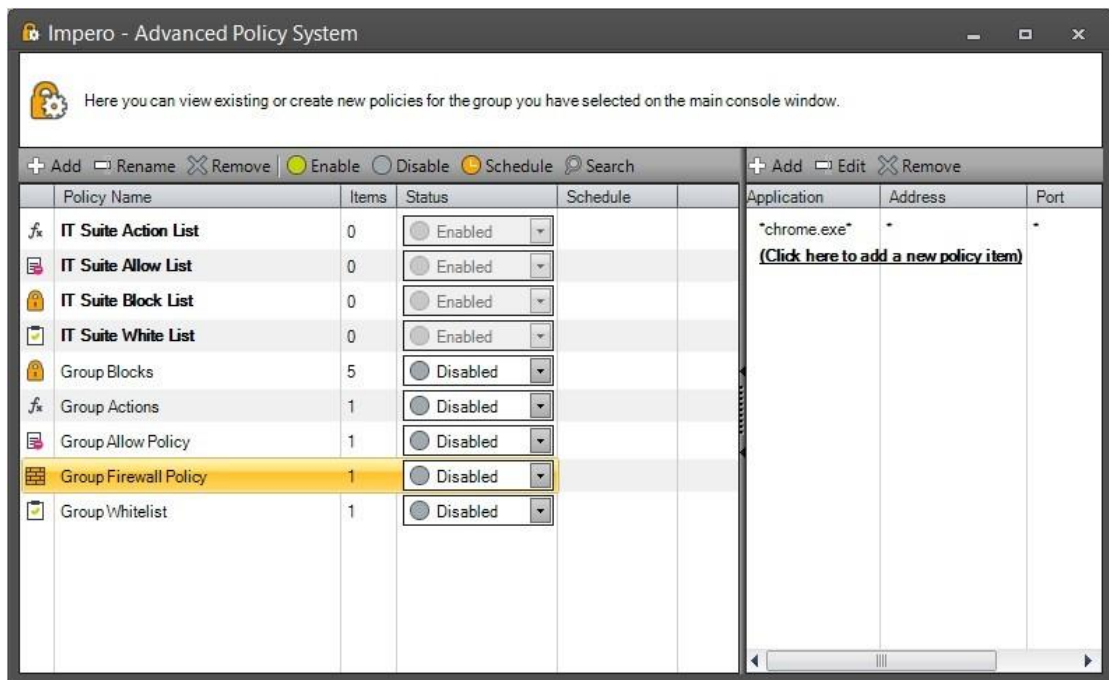


Image 23.2 - Added Firewall Policy

- By default, your new policy is set to 'Disabled'.
- Use the 'Status' drop-down list in order to set your policy to 'Enabled'.
- You can also set the policy to 'Scheduled', which allows you to set specific times during which this policy is active.

2.2.4.1.6 MIME Type Policy

The 'MIME' policy allows you to block specific file types from appearing on websites, i.e., Flash or GIF files.

- In the 'Policy Name' field, enter a name for the policy you are about to create.
- Ensure the 'MIME Type Policy' is selected.

- The policy name you entered is then displayed in the left-hand side of the window.

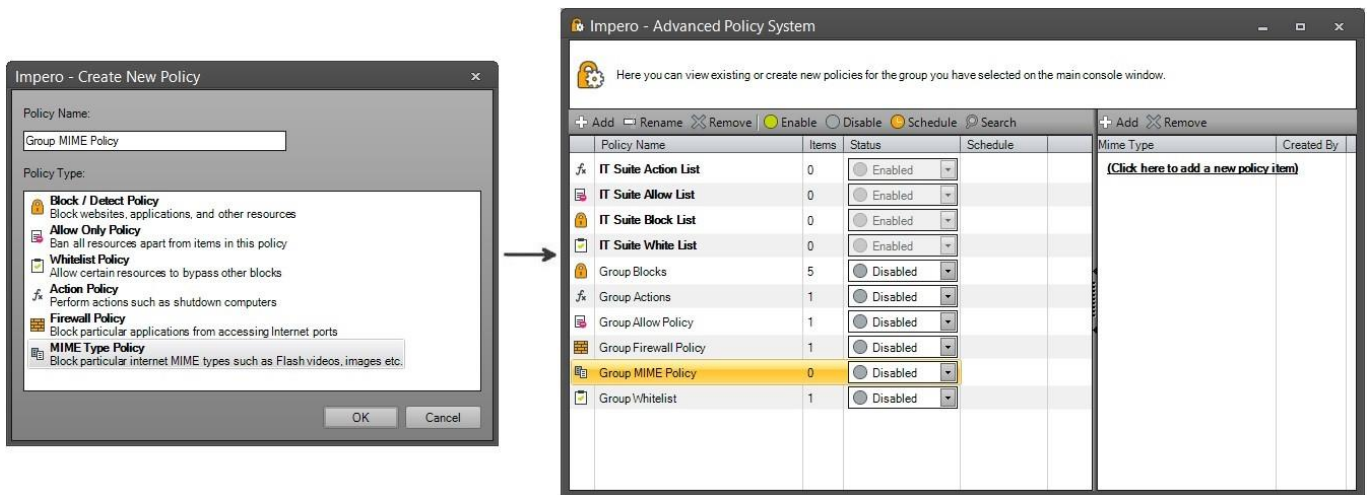


Image 24 - Create MIME Type Policy

- Click on the policy name to select it.
- With your policy selected, click on the 'Add' button on the right-hand side of the window.
- This opens the 'Add/Edit Policy Item' window.
- Select from the list in this window which MIME type you wish to block access to (Image 24).

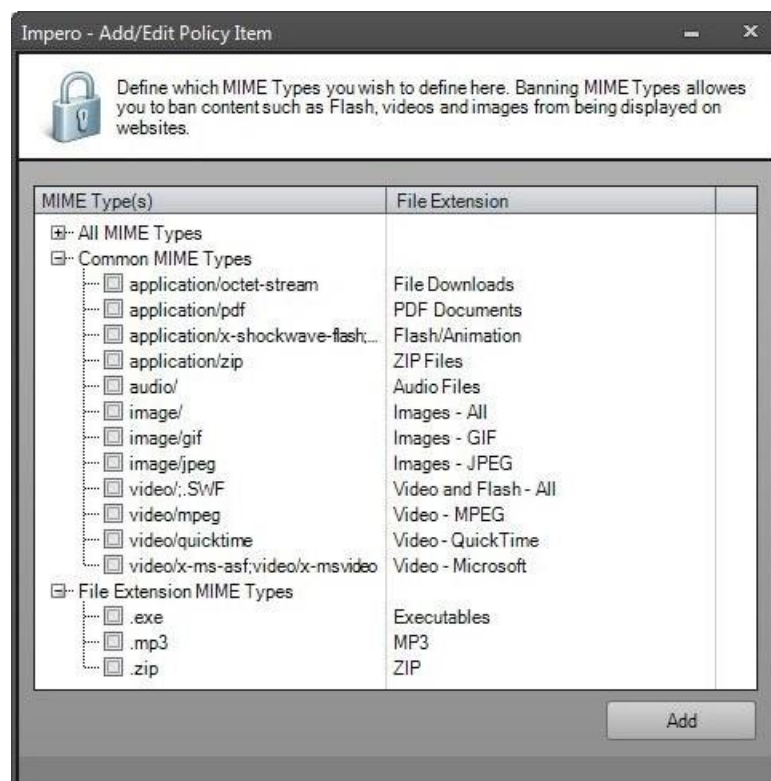


Image 24 - Advanced Policy - MIME Type Policy

Note: MIME Types are only supported by the Impero Proxy.

- Once you have configured your policy, click on the 'Add' button.

- Your policy item is then added to your newly created 'MIME' policy.

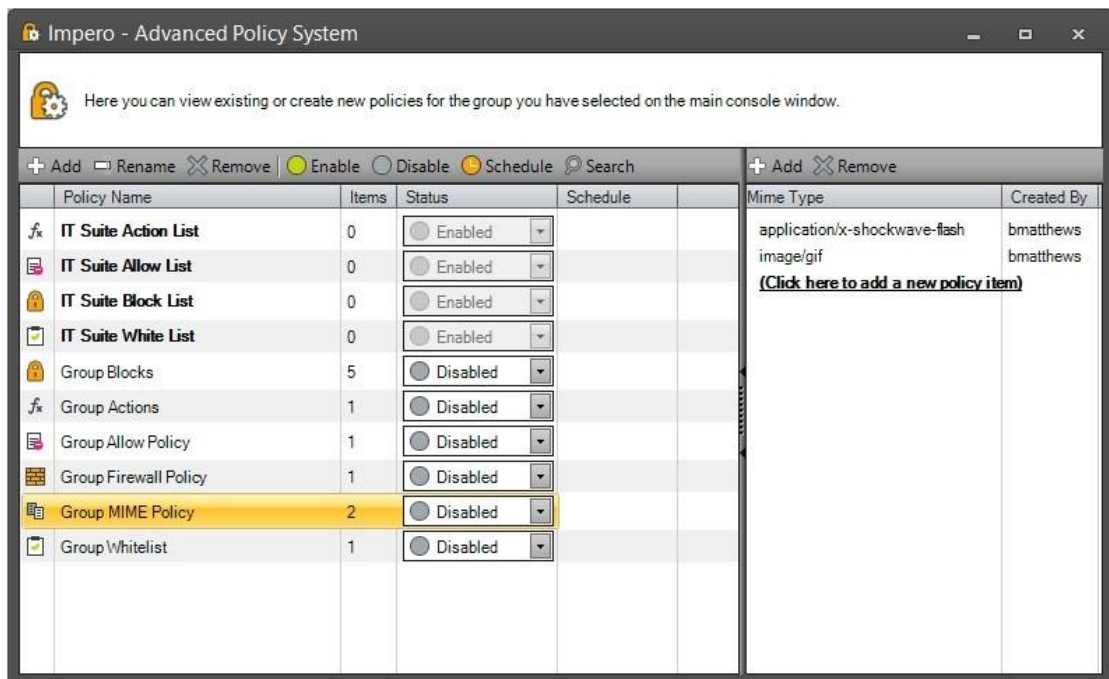


Image 24.2 - Added MIME Type Policy

- By default, your new policy is set to 'Disabled'.
- Use the 'Status' drop-down list in order to set your policy to 'Enabled'.
- You can also set the policy to 'Scheduled', which allows you to set specific times during which this policy is active.

2.2.4.2 Mass Policy Editor

You can access the 'Mass Policy Editor' by right-clicking on any 'Block/Detect Policy' and selecting the 'Mass edit policy items' option. This then opens the 'Mass Policy Editor' window (Image 25).

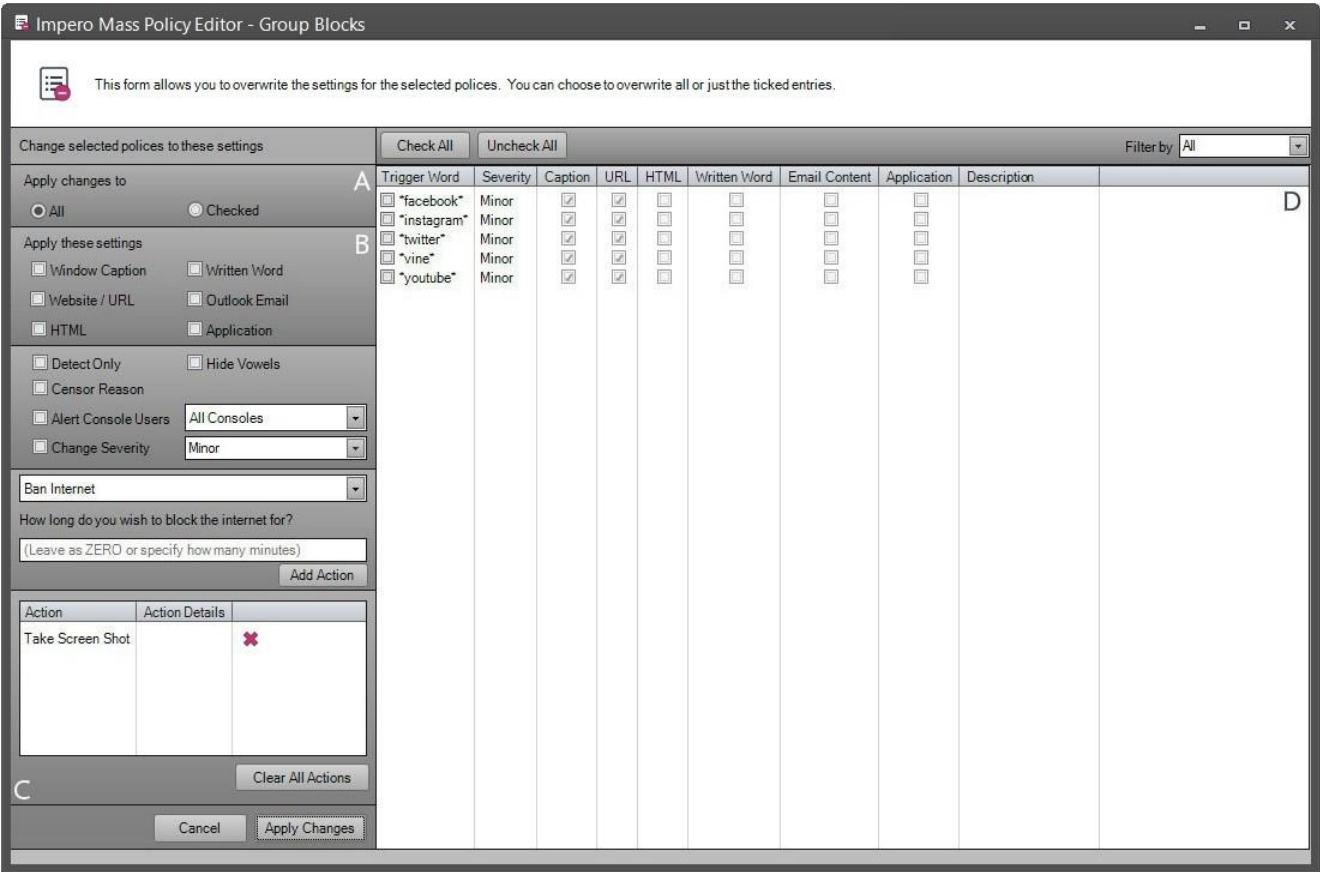
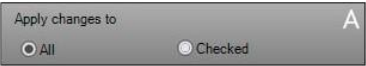


Image 25 - Mass Edit Policy Items

This window displays, on the right-hand side, a list of all the items contained within this policy item. On the left-hand side, you are able to select which properties you wish to apply in mass.



A - Select which policy item you wish to make changes to. If you leave 'All' selected, then every policy item on the right-hand side (Image 25 - [D]) is affected by any changes you make. If you select 'Checked', then only those policy items that are selected by a tick in the 'Trigger Word' column are affected by any changes.

Apply these settings

☐ Window Caption ☐ Written Word

☐ Website / URL ☐ Outlook Email

☐ HTML ☐ Application

☐ Detect Only ☐ Hide Vowels

☐ Censor Reason

☐ Alert Console Users

☐ Change Severity

B Select which setting you wish to apply in mass to the chosen policy items. Tick the options that you wish to apply; firstly, what you wish to block/detect followed by properties of the policy such as which Console users are notified of the violation and the severity of the violation.

Ban Internet

How long do you wish to block the internet for?
(Leave as ZERO or specify how many minutes)

Add Action

Action	Action Details
Take Screen Shot	✖

Clear All Actions

C Select the advanced actions that are applied in mass to the chosen policy items. Select from the drop-down list which action you wish to apply, and in the field below you can further specify the action that takes place. Once the action has been selected and specified, click on the 'Add Action' button, which adds the action into the table below. If you wish to remove any of the actions, click on the button, or select 'Clear All Actions' to remove all actions.

Check All		Uncheck All		Filter by All					
Trigger Word	Severity	Caption	URL	HTML	Written Word	Email Content	Application	Description	
<input checked="" type="checkbox"/> "facebook"	Minor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		D
<input checked="" type="checkbox"/> "instagram"	Minor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/> "twitter"	Minor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/> "vine"	Minor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/> "youtube"	Minor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

D View a list of all the items contained in the policy that you selected to mass edit. The 'Trigger Word' column displays the term that triggers the violation alongside a tick box. Mark the tick box in order to select the item; you can then select the 'Checked' option (Image 25 - [A]) in order to make changes to the ticked policy items. The other columns in this view displays you where the trigger word is being searched for and any description that may be added to the policy item.

Additional options at the top of (Image 25 - [D]) allow you to 'Check All' policy items, 'Uncheck All' policy items or filter the policy item list by severity.

Once you chose which policy items you wish to edit (Image 25 - [D]), and the changes that you wish to make to those items (Image 25 - [A - C]), click on the 'Apply Changes' button in the bottom left-hand corner of the window. To discard any changes, you have made in this window, click on the 'Cancel' button before you apply changes.

2.2.5 Confide Viewer

The Impero Confide system is a confidential reporting service that allows users to send notifications, anonymously if they wish, of any concerns that they may have about themselves or any other person. Initial configurations of the Confide System take place in the Impero Server; from where you can set up which users have access to see the 'Confide Viewer'. All users have access to submit Confide notifications, but only specified users should be able to access the Confide Viewer.

Submitting Confide Issues

In order for a user to submit a Confide issue, they can right-click on the Impero icon in their system task tray and select the 'Confide' option (Image 26).

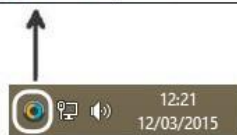
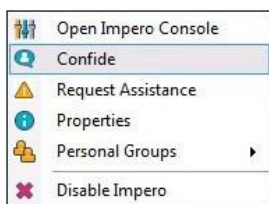


Image 26 - Confide

Alternatively, in the Impero Server, there is the option to 'Show Reporting Button on Desktop'. If this option is set, then every user also sees a button on their desktop (Image 26.1) which they can click to submit a Confide notification.



Image 26.1 - Confide Button

Upon selecting the 'Confide' option, the user are met by the welcome screen. The content of this screen can be modified from within the Impero Server. Click on the 'Continue' button on the welcome screen to proceed to the next window from which the user can enter the details of the issue they wish to report (Image 26.2).

A screenshot of the 'Confide' application window showing the reporting form. The title bar says 'Confide'. The form is divided into several sections:
1. 'Please detail the issue you wish to report:' with a text area containing the text 'I am worried that my friend Peter is having problems with certain other members of the group.' and a small '1' in the bottom right corner.
2. 'Please select who you wish to send your report to:' with two radio button options. The first option is 'Bob Smith' with a cartoon illustration of a man and the text 'Please submit to me any concerns regarding bullying.'; this option is selected, indicated by a green checkmark. The second option is 'Laura Johnson' with a cartoon illustration of a woman and the text 'If you have any concerns that may not be construed as "bullying", please send them to me.'; this option has a small '2' in the bottom right corner.
3. 'Do you wish to remain anonymous?' with a 'Yes' checkbox.
4. 'Please contact me by' with three radio button options: 'Email', 'In Person', and 'Phone'.
5. Input fields for 'Name', 'Email', and 'Phone'.
6. 'Cancel' and 'Submit' buttons at the bottom right, with a small '3' next to the 'Submit' button.

Image 26.2 - Impero Confide System

The user can type into this text area to enter the details of the issue that they wish to report.

1 The user can then select who they wish to send their report to. The people that appear in this list can be configured as Administrators of the Confide System in the Impero Server, where you can add the administrators name, a picture of the person and a short description relating to them, as well as their email address which is not displayed here.

Note: The people that appear in this list are the users that have access to the 'Confide Viewer' in the 'Group' toolbar.

By default, each person in this list have a green tick against their name. The user submitting the report can click anywhere within the box containing each administrators information to toggle the green tick on or off; the green tick indicates the person that is notified when the report is submitted.

2 The user then has the option to add their contact information. If they wish, they can tick the box next to 'Do you wish to remain anonymous' which then hides the fields asking for contact information. If the box remains un-ticked, the user can add their name, email address and telephone number, and specify how they wish to be contacted should any follow-up be required. If desired, the option to remain anonymous can be removed via a setting in the Impero Server.

Once the user has added all the necessary information and ticked who they wish to submit their concern to, they can then click on the 'Submit' button. This then closes the Confide window on the user screen. The administrator(s) that is ticked receives an email notification that a report is submitted to them.

Note: The email alert is only generated providing your mail server settings have been entered in the Impero Server.

Viewing Confide Issues

Impero Console users that have been given the relevant privileges can access the 'Confide Viewer' through the 'Group' toolbar in order to view any issues that have been reported to them (Image 26.3).

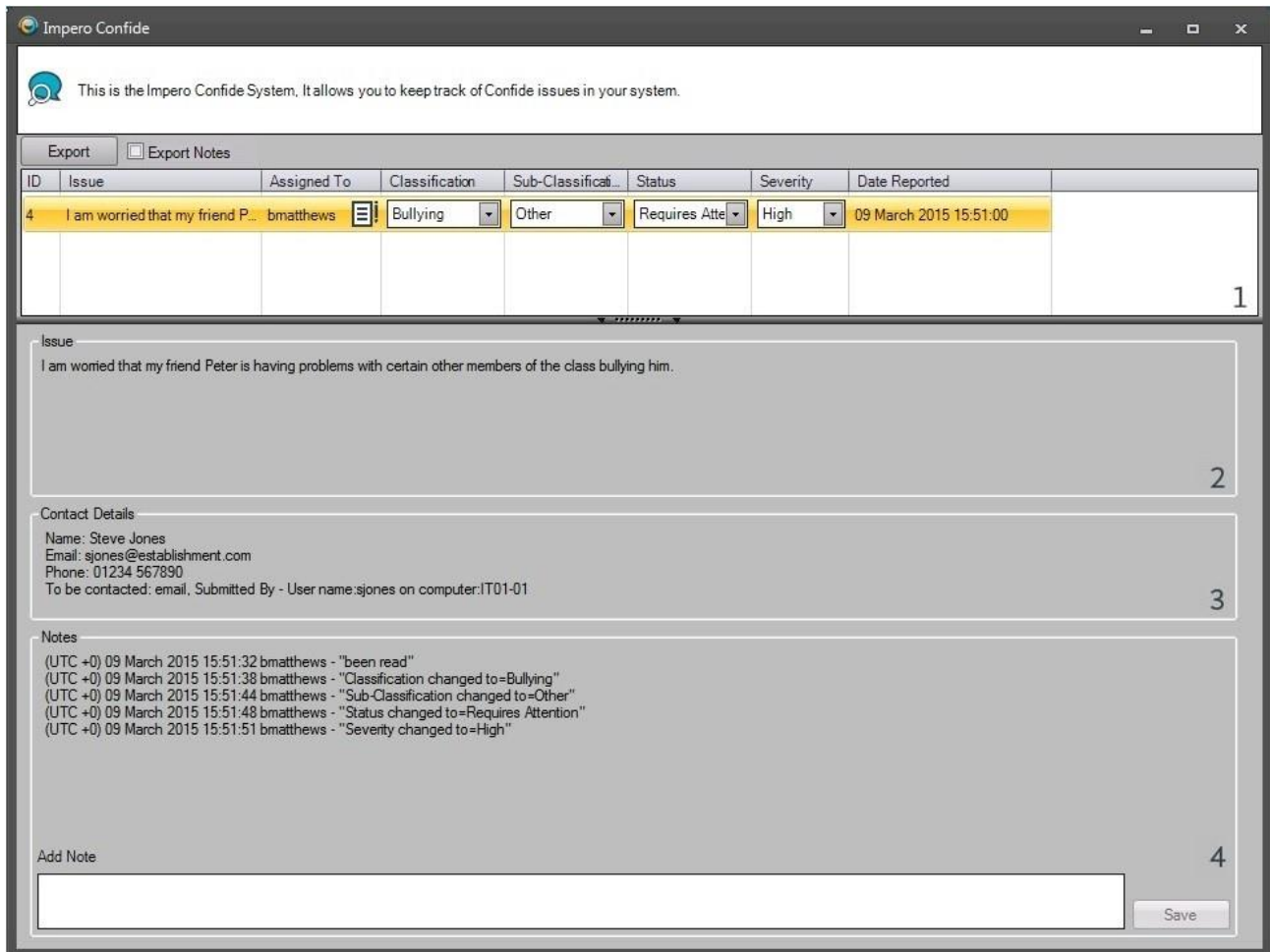


Image 26.3 - Confide Viewer

1 - View a list of the issues that are currently assigned to you. There are a number of columns of information for each issue:

ID

Each issue in the Impero Confide System is assigned a unique ID that is displayed in this column.

Issue

This column contains the details of the issue that has been submitted by the user. Once the issue is selected, you can view the same information in (Image 26.3 - [1]).

Assigned To

See which Confide administrator this issue is currently assigned to. You can click on the icon to assign the issue to anyone else that is set up to be a Confide Viewer.

Classification

Use the drop-down list to add or change the classification of the issue. The list of classifications can be set up in the Impero Server.

Sub-Classification

If a Classification is assigned to the issue, use the drop-down list to add or change the Sub-Classification of the issue. The list of Sub-Classifications can be set up in the Impero Server.

Status

Use the drop-down list to add or change the Status of the issue. The list of Statuses can be set up in the Impero Server.

Severity

Use the drop-down list to add or change the Severity of the issue. The list of Severity's can be set up in the Impero Server.

Date Reported

The date and time at which the original issue was submitted.

2 - Issue

This panel contains the full description of the issue that was entered by the user who originally submitted the concern from (Image 26.2 - [1]).

3 - Contact Details

This panel contains contact details that have been submitted by the user who originally entered the issue, as well as preferred contact method (Image 26.2 - [3]). This is displayed as blank if the user submitted an anonymous issue.

4 - Notes

This panel automatically updates to display when the issue has first been read and who by. Any changes to the 'Assigned To', 'Category', 'Sub-Category', 'Status' and 'Severity' fields also automatically displays in the Notes area. There is also a text area labelled 'Add Note' in which Confide administrators are able to enter notes to display in this field also. For any of these changes, the note displays the name of the user that made the change.

2.2.6 Violation Viewer

The 'Violation Viewer' feature is a restricted version of the full ['Log Viewer'](#). You see this option under the 'Group' toolbar if you have been assigned this level of access.

- Click on 'Violation Viewer' from the 'Group' toolbar.
- This opens the 'Violation Viewer' window (Image 27).

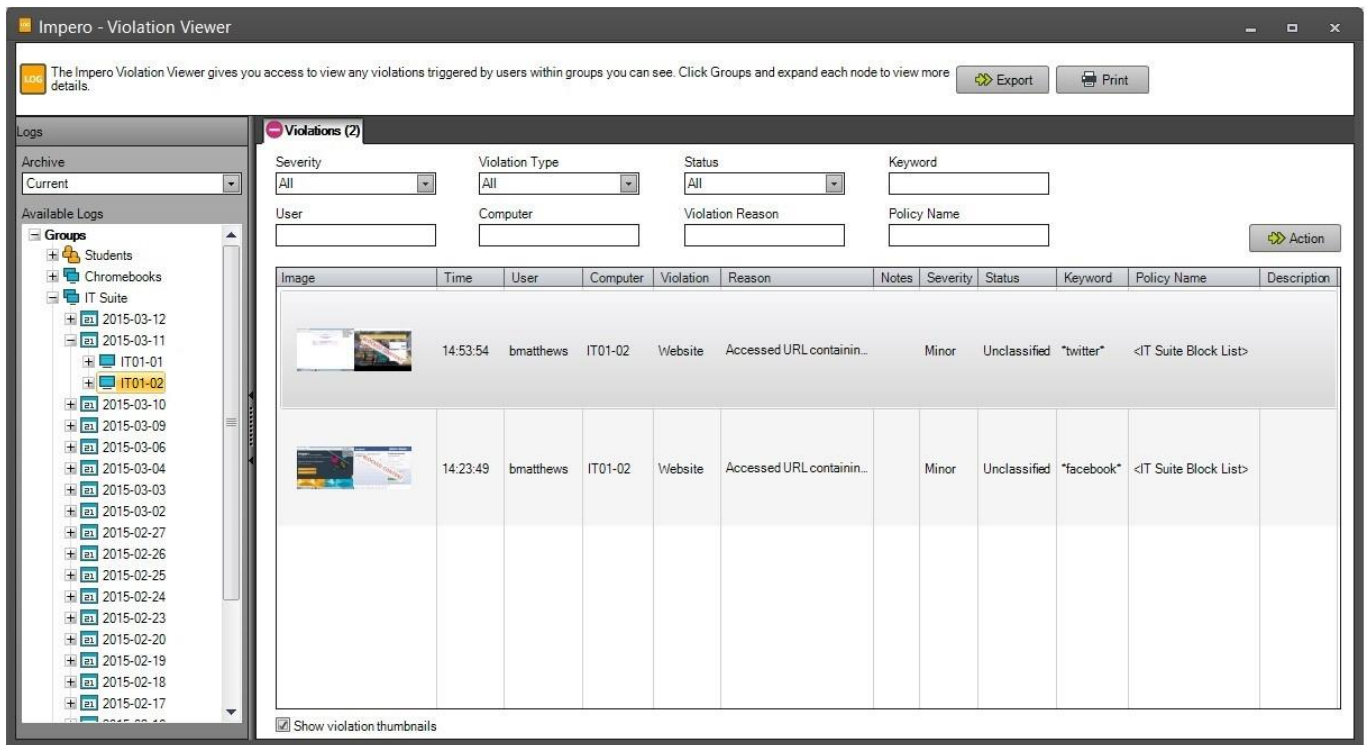


Image 27 - Violation Viewer

- On the left-hand side of the window, you see a 'Groups' node.
- Expand this to view a list of the groups that you have access to in the Impero Console.
- Expand a group further to see a list of dates.
- Select a date to view - on the right-hand side - a list of all violations generated on that day.
- Expand a date node further to view a list of all logged in computers on that day.
- You can now view violations generated on specific computers or expand further to view by specific users.

For full information on the columns that display in this window, and the actions you are able to perform, please see the ['Log Viewer'](#) section.

2.3 Screen Toolbar

The 'Screen' toolbar allows you to perform various tasks for one or all computers in your group. For example, you could take a screenshot of your entire group, broadcast your screen or a user's screen to the rest of the group, record screens, and view or remotely control user computers.

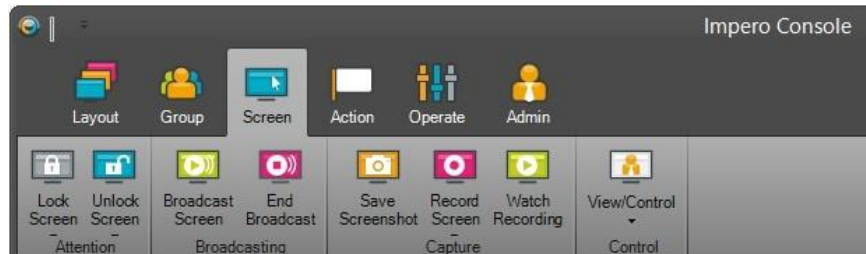


Image 28 - Screen Toolbar

2.3.1 Lock Screen

This feature allows you to lock the screens (Image 29), keyboards and mice of all computers in your group or by individual users.

Select the 'Lock Screens' icon from the 'Screen' toolbar and you are then presented with two additional options to choose from: 'Locked ticked Users' and 'Lock this Group'.



Image 29 - Locked Screen

Note: You can modify the lock screen image and text to something of your own branding. This can be configured in the Impero Server.

Locked Ticked Users

This option locks all of the users you have [selected](#). Impero moves the users to the 'Screens Locked' group, which means that any computer that the user tries to use it is locked. To remove the lock, select the user and click on the 'Unlock Screen' icon from the

'Screen' toolbar and choose 'Unlock Ticked Users', or right mouse click on the user and select 'Remove From Group > Screens Locked'.

If the user is not currently logged on, then you are required to right-click on the 'Screens Locked' group and then select 'Properties' and remove the desired users from the group by using the 'Delete' button to the right of their username.

Lock this Group

This option locks the entire group regardless of selected users. Impero locks the computers with or without users logged in. To unlock the group, click on the 'Unlock Screen' icon under the 'Screen' toolbar and select 'Unlock this Group'.

2.3.2 Broadcast Screen

This feature gives you the ability to broadcast your screen to student computers, or even broadcast a student's screen to other student screens.

Broadcast Your Screen

- Select the users you wish to broadcast to.
- Click on 'Broadcast Screen' from the 'Screen' toolbar.
- The 'Impero - Broadcast Options' dialogue window opens (Image 30).

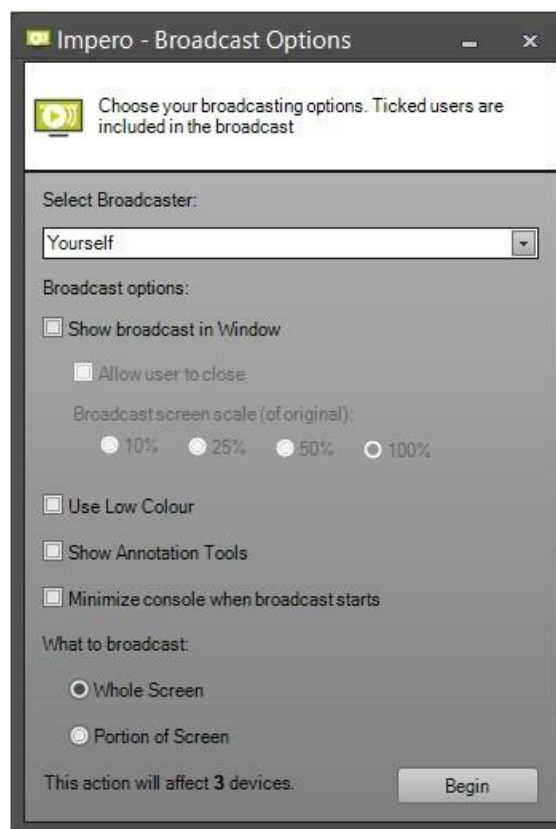


Image 30 - Broadcast Options

- To broadcast your display in full-screen make sure 'Select Broadcaster' is set to 'Yourself'.

- Ensure 'What to broadcast' is set to 'Whole Screen'.
- Click on the 'Begin' button.
- Users then see your screen on their computer and are unable to switch from this view and are not allowed to cancel it. To end the broadcast just click on 'End Broadcast' on the 'Screen' toolbar.

There are a number of other options that are available to you when configuring your broadcast:

Select Broadcaster

The drop-down list contains a list of all the users in your currently selected group. Select from the list whose screen you wish to broadcast to selected users.

Show broadcast in Window

The broadcast then opens in a new window, allowing the user to switch between windows on their computer.

Allow user to close

The user that is receiving the broadcast has the ability to close the broadcast on their computer.

Broadcast Screen Scale (of original)

To reduce the size of your broadcast, select 'Show broadcast in Window' and pick either 10%, 25%, 50%, or 300%. If this is selected, users can switch between open windows.

Use Low Colour

Uses less colours to reduce the size of the broadcast.

Show Annotation Tools

Allows you to use various annotation tools on your screen during a broadcast.

Minimize console when broadcast starts

Selecting this option minimizes the Impero Console as soon as the broadcast begins, so that receivers of the broadcast do not see the Console window.

What to broadcast:

Whole Screen

Displays broadcast in full on remote users' desktop. Users are then unable to switch between windows on their computer.

Portion of Screen

Allows for only a portion of the screen to be broadcast. You can click and hold the top part of the 'Select Record Area:' window (the red box) and move the recording area to the desired location. To change the size of the recording area, click and hold any edge of the box and drag to the required size. Once you have the red box displaying the correct area, click on the 'Begin' button to start the broadcast.

You see a field at the bottom of this window informing you of how many devices receive this broadcast.

2.3.3 Save Screenshot

This feature allows you to take screenshots from any selected computers at once.

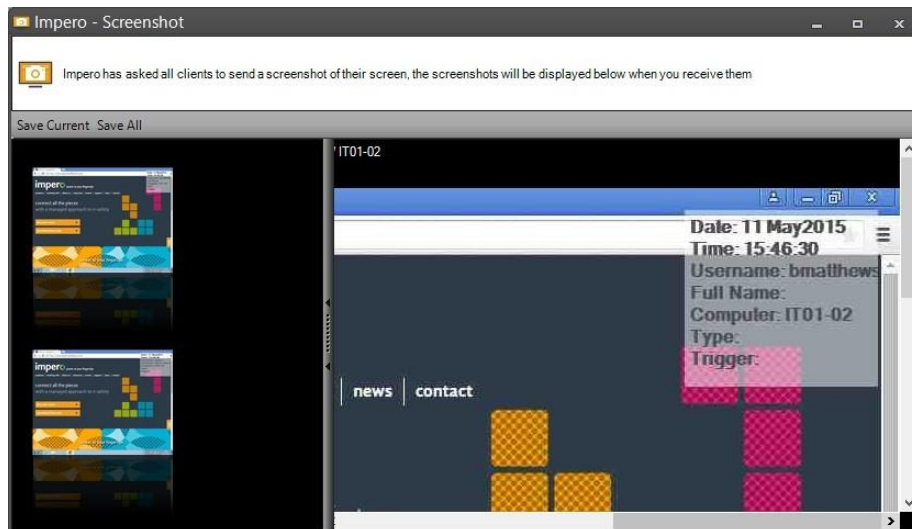


Image 31 - Save Screenshot

- Select the computers that you wish to take a screenshot of.
- Click on the 'Screen' toolbar and select 'Save Screenshot'.
- A new window opens, that displays all the selected screenshots in the left-hand panel.
- Click to select an image in the left-hand panel, which loads the image in the main frame on the right-hand side.
- By utilising the scroll bars, you are able to move around the image; a stamp in the upper right-hand corner tells you the user, computer, time and date on which the screenshot was taken.
- There are two additional options allowing you to save the screenshots:

Save Current

Click on this option to save the currently selected screenshot. Browse to the location you wish to save the image, give the file a name and then click on 'Save'.

Save All

Click on this option to save all screenshots from the left-hand panel. Browse to the location you wish to save the images and click on 'OK'. The files are automatically saved as 'username-computername.jpg'.

2.3.4 Record Screen

This feature allows you to record one or more user screens simultaneously.

- In the Console, select the computers that you wish to record.
- Click on the 'Screen' toolbar and select 'Record Screen'.

- You then see a number of options that you can set for this recording (Image 32).

A screenshot of a Windows-style dialog box titled "Impero - Record Screen Options". The dialog has a dark grey border and a light grey background. At the top, there is a small Impero logo and a message: "Please select recording options, you can watch recordings by selecting 'watch recording' on the main menu bar". Below this, there is a checkbox labeled "Warn user that they are being recorded". Underneath the checkbox is a text input field labeled "Subject / Description". Below the text field is a numeric input field labeled "Recording Duration in Seconds" with a value of "5" and a note "(Maximum duration is 1 hour (3600 secs))". Below the duration field are two radio buttons: "Public" (selected) and "Private". Under the "Private" radio button is a note: "Private recordings can only be viewed by you." At the bottom left is a checkbox labeled "Record This Computer". At the bottom right is a "Begin" button.

Image 32 - Record Screen Options

Warn user that they are being recorded

Select this to prompt the end-user with a notification to tell them that their screen is being recorded (Image 32.1).

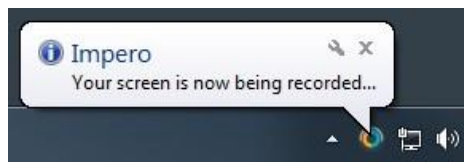


Image 32.1 - Record Notification

Subject/Description

Add a title for your recording, which helps you to identify it amongst the list of viewable recordings.

Recording Duration in Seconds

Enter the length of time that you wish to record the selected computers for, in seconds. The maximum length you can enter here is 3600, which equates to one hour.

Type of Recording

Select whether this recording is 'Public' or 'Private':

Public - The recording is then viewable by any Impero Console user. **Private** - The recording is then only viewable by you.

Record This Computer

Select this option if you wish to record your own computer.

Once you have set the necessary options, click on 'Begin' to commence your recording.

2.3.5 Watch Recording

This feature loads all public and private recordings. In order to watch a recording:

- Click on the 'Watch Recording' icon from the 'Screen' toolbar.
- The new window displays a list of all recordings that are available for you to view.
- 'Public Recordings' is displayed at the top of the window.
- Select the recording that you wish to view and click on the 'Watch Recording' button (Image 33).
- The recording opens and plays in a new window.

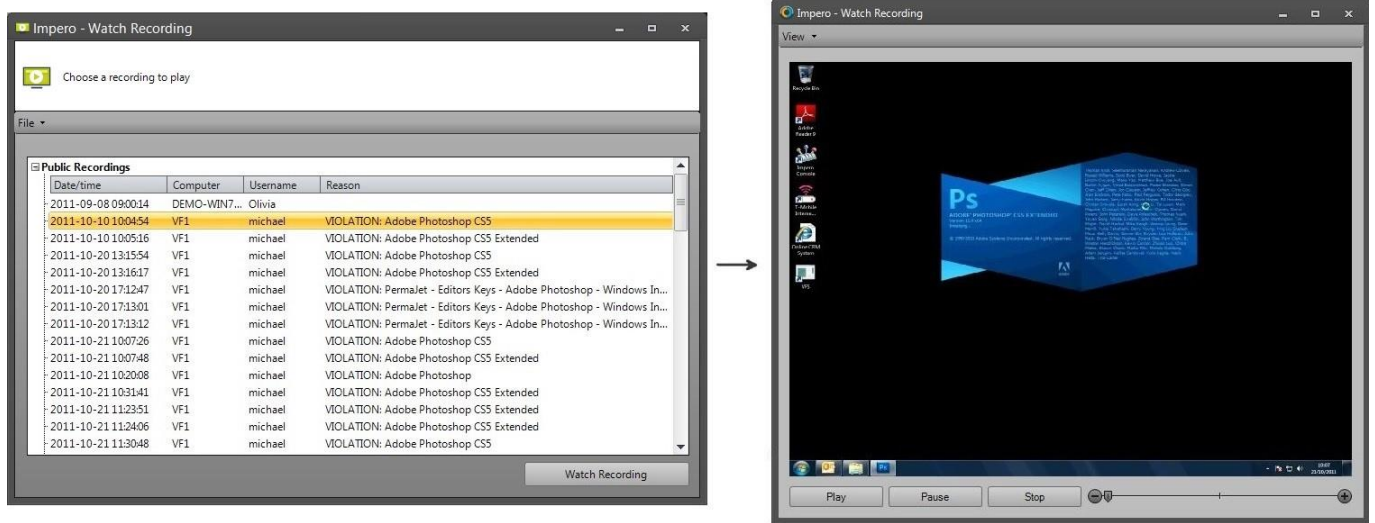


Image 33 - Watch Recording

- If you have created any 'Private Recordings', they are displayed at the bottom of the 'Watch Recording' window, in an expandable list under your username (Image 33.1).

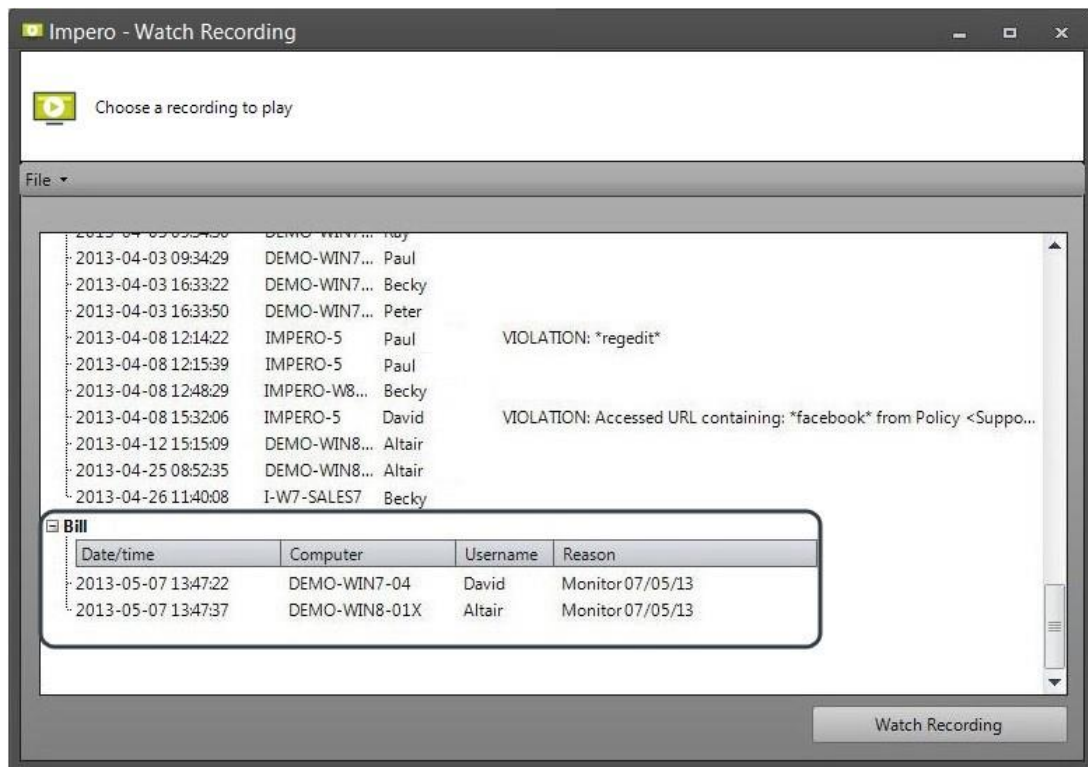


Image 33.1 - Private Recordings

2.3.6 View/Control

This feature allows you to view a remote computer in an independent window. The window opens in the 'view only' mode by default, with additional options that allow you to take control.

- In the Console, select the computer that you wish to view and/or control.
- From the 'Screen' toolbar, select 'View/Control'.
- This can also be achieved by double-clicking your mouse on the computer you wish to view and/or control.

- This opens the 'View/Control' window with a toolbar across the top which offers further options (Image 34).

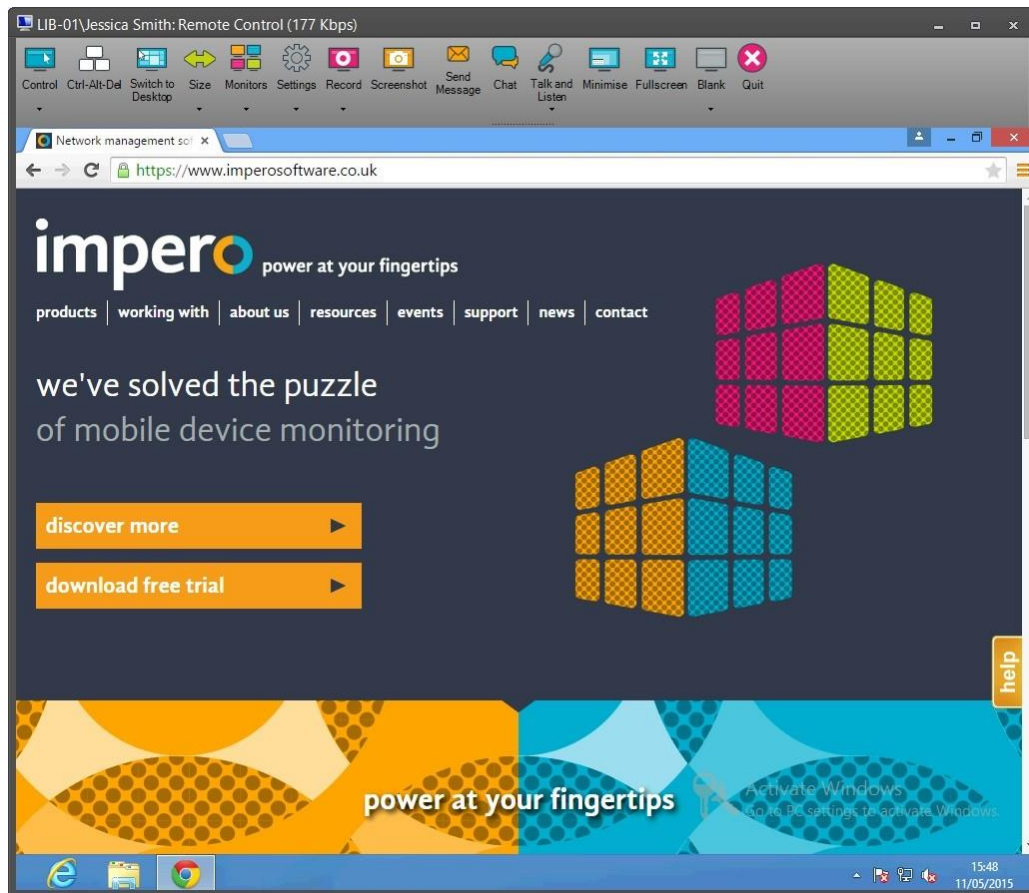


Image 34 - Remote Control

Note: If you are viewing a Chromebook/iOS device, you see only see features in this toolbar that are supported by the client Operating System.

Control

Click on the 'Control' icon to take control of the selected computer. This also removes all control from the end-user. To give control back to the user, click on the 'Control' icon again; this is a toggle button and switches between 'Take Control' and 'No Control'.

The drop down arrow displays to you the current selection and give you additional options of 'Shared Control' and 'Send Ctrl-Alt-Del'. Shared control allows you and the user to control both the keyboard and mouse at the same time, while 'Send Ctrl-Alt-Del' sends a 'Control + Alt + Delete' command to the computer.

Ctrl-Alt-Del

Click on this option to send a 'Control + Alt + Delete' command to the remote computer.

Switch to Desktop

This option only appears when viewing a Windows 8 machine. Click on this option to switch from the Windows 8 Metro screen back to the user desktop.

Size

When remote viewing a device you have multiple sizes available to choose from. By clicking on the 'Size' icon it shuffles through the different sizes for you, or you can click on the down arrow at the bottom of the 'Size' icon and choose either 25%, 50%, 75% or 100%.

Monitors

If the computer you are viewing has multiple monitors, use this option to choose which monitor to view.

Settings

This option contains a number of options that you can apply to your remote session:

Low Color - Switches remote PC to low color mode.

Use Video Driver - Use remote PC's video driver to increase remote speed.

Track Mouse - Allows screen navigation via mouse if full screen is not displayed.

Stretch - Stretches the screen of the remote computer to fill your screen.

Capture Transparency - Displays transparent windows used in programs such as Microsoft Office.

Capture Video Overlay - Captures text and icons overlaid on video.

Capture Vista Aero - Allows viewing of transparent windows used in Vista and Windows 7.

Use JPEG Compression - Allows compression of JPEGs to decrease bandwidth usage.

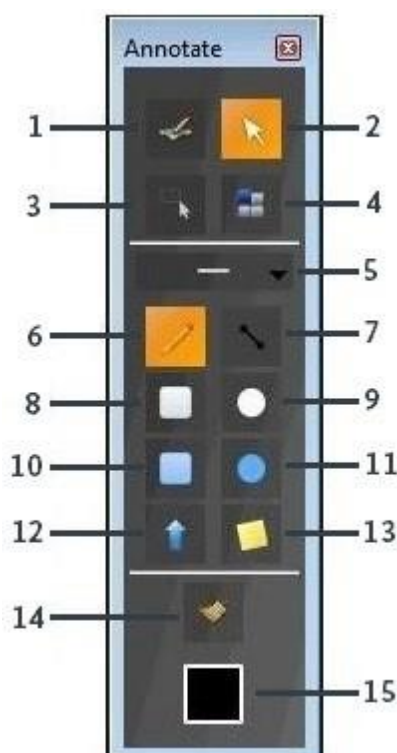
Show Remote Cursor - Displays your cursor on the user screen.

Show Annotation - Opens an 'Annotate' window on the user screen giving you additional tools (Image 34.1).

Always Take Control on Full Screen Mode - Anytime you take control of a user computer, it opens on full screen mode.

Additionally, if you go to 'Full Screen Mode' on a remote computer, it immediately takes control.

Go to Full Screen Mode when Maximising Window - When you have a user computer open and you click on the maximise button, it goes into full screen mode.



1: Start Annotating - Makes your annotation tools active.

2: Stop Annotating - Deactivates the annotation tools.

3: Selection Tool - Select annotations on the user screen to move or edit them.

4: Application Dock Mode - Select an application to dock any annotations within it.

5: Line Width Picker - With options for Small, Medium, Large and X-Large.

6: Pencil Tool - Allows free-hand drawing on the user screen.

7: Line Tool - Allows you to draw straight lines on the user screen.

- 8: Rectangle Tool - Draw rectangular shapes on the user screen.
- 9: Circle Tool - Draw circular shapes on the user screen.
- 10: Filled Rectangle Tool - Draw color-filled rectangular shapes on the user screen.
- 11: Filled Circle Tool - Draw color-filled circular shapes on the user screen.
- 12: Arrow Tool - Draws arrows on the user screen.
- 13: Note Tool - Place a sticky note on the user screen and add/edit text.
- 14: Clear The Screen - Clears any annotations from the user screen.
- 15: Color Picker - Choose from different color options for your annotations.

Record

[Record the screen](#) of the computer you are viewing.

Screenshot

Take a [screenshot](#) of the computer you are viewing.

Send Message

Sends a message to the selected computer. The message is displayed in a new pop-up

Image 34.1 - Annotation Tools window on the user desktop.

Chat

Open a chat window in which you can send messages to the remote user and they are able to respond to you.

Talk and Listen

This feature allows you to interact with the sound on a user computer by listening and/or speaking to the user.

Minimise

Minimises the remote session.

Fullscreen

This maximises the user desktop to the resolution defined by the user computer. Click on 'Fullscreen' again to turn this feature off.

Blank Screen

This option allows you to work on the computer without the user seeing what you are doing. To blank the screen, click on the 'Blank' icon from the menu bar area and enter a message. This turns the end-user's screen black with your message displayed across the screen. To remove the blank screen from the user computer, click on the 'Blank' icon again.

Quit

Click on this option to close down your remote session.

2.4 Action Toolbar

The 'Action' toolbar (Image 35) allows you to send messages, host chat forums, create online exams, ask quick questions, send/ collect files, run a website/file and assign tasks to the user.

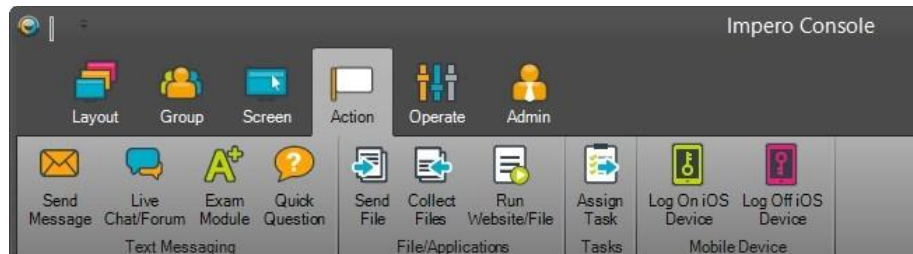


Image 35 - Action Toolbar

2.4.1 Send Message

You can use this feature to quickly send a message to one or more users.

- In the Console, select the user(s) that you wish to send a message to.
- From the 'Action' toolbar, select the 'Send Message' button.
- You are then presented with a new window (Image 36).

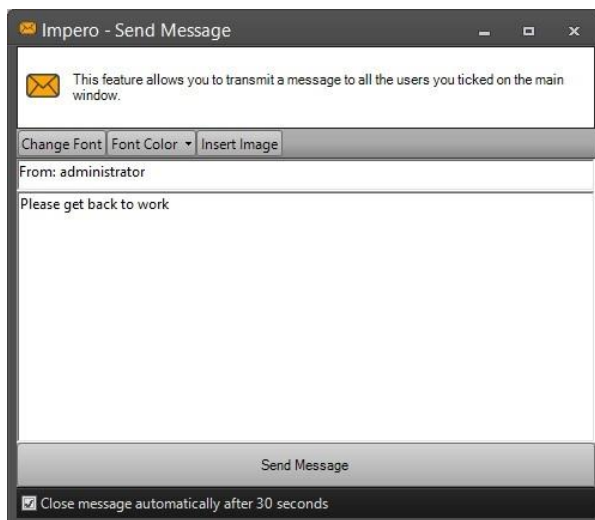


Image 36 - Send Message

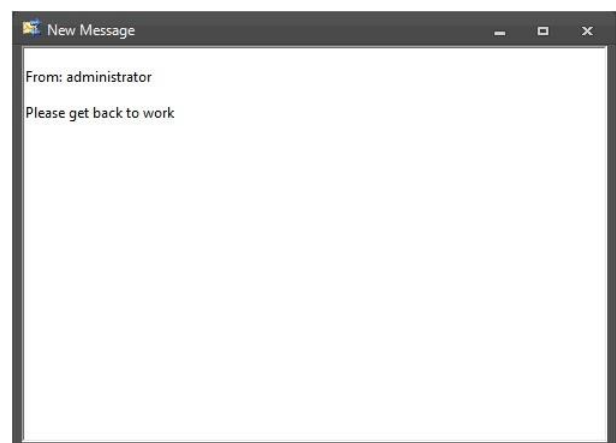


Image 36.1 - Received Message

- Type the message that you wish to send into the text area in this window.
- Once you wrote your message, click on the 'Send Message' at the bottom of the window.
- The user then receives the message in a pop-up window on their desktop (Image 36.1).

2.4.2 Live Chat/Forum

Use this feature to create an interactive chat forum that any selected users can participate in.

- In the Console, select the users that you wish to invite into your chat session. From the 'Action' toolbar, select 'Live Chat/Forum'.
- You are then prompted to enter a conversation topic.
- Name your topic and click on 'OK'.
- The chat window then opens, with a list of participants on the right-hand side (Image 37).
- Enter a message at the bottom of the window and click on 'Send' to begin chatting.
- Selected users see the same window and be able to respond in the same manner (Image 37).

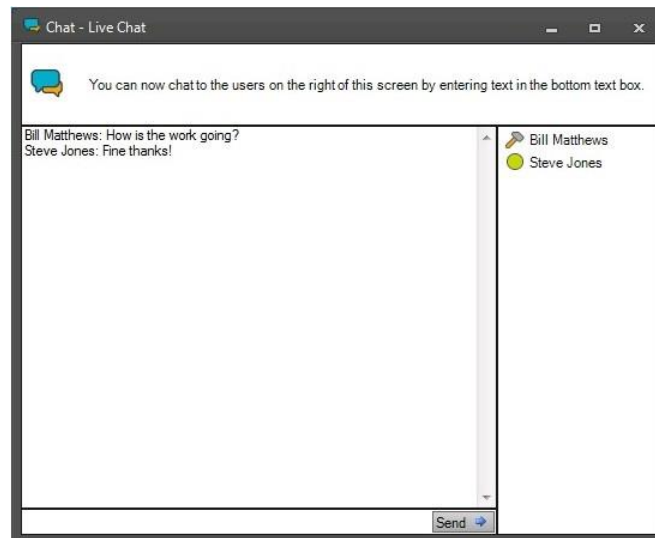


Image 37 - Live Chat

- To end the chat session, close the window by clicking on the 'X' in the top right-hand corner of the window.
- This simultaneously closes the chat window for all participants also.

2.4.3 Exam Module

The Exam Module allows you to build an online exam with a variety of different question and answer types. You can launch the Exam Module by selecting the 'Action' toolbar, and then clicking on the 'Exam Module' button. This opens the 'Exam Wizard' window on your screen (Image 38).

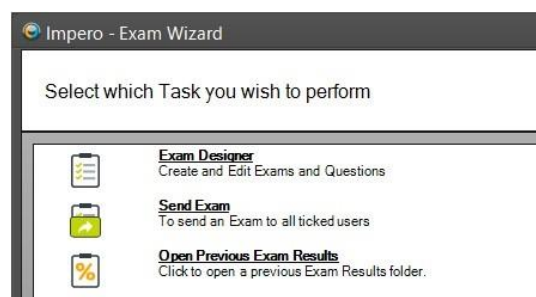


Image 38 - Exam Wizard

2.4.3.1 Create New Exam

In order to begin creating an exam, click on the 'Exam Designer' link. You then see a new 'Exam Wizard' window (Image 39).

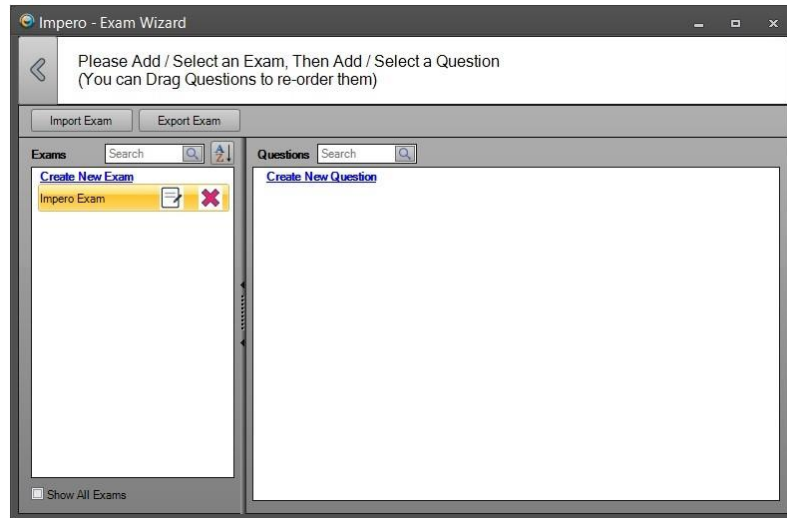


Image 39 - Exam Wizard

In the left-hand panel, select the 'Create New Exam' link. You are now able to set the properties for the exam that you wish to create (Image 39.1).

Image 39.1 - Exam Properties

Exam Title

Give a title for your exam. This allows you to later identify your exam when you wish to deploy it.

Allow Students to go back to previous question(s)

Checking this allows exam participants to navigate backwards through their exam. If you leave this unticked, the participant is unable to go back to a question that has already been answered.

Turn Auto-Marking Off and Mark Manually after the exam

This option stops the exam from being automatically graded and leave the marking to you upon completion. The exam is automatically marked by Impero based on the answers you have selected as correct.

Randomise the order of questions for each student at the start of the exam

Selecting this option sends the participants the exam but deploy the questions in a random order instead of the order in which the questions were created.

Time Allowed For Exam

This button by default says 'Unlimited Time' which means that there is no time limit applied when the exam is deployed to participants. In order to apply a time length, click on the 'Unlimited Time' button which toggles it to 'Time Limit' (Image 39.2). You can then enter a time period (hh:mm:ss) into the field to the right; the exam automatically ends after the applied time limit.

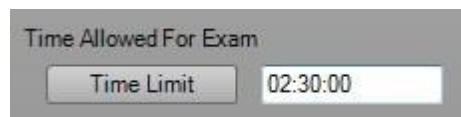


Image 39.2 - Time Limit

Note: If you apply time limits to specific questions, the time limit for the exam is automatically modified to reflect the question times. For example, if you apply a time limit to every question and the total time of the questions is different to the exam time entered here, your exam duration reflects the sum time of all the questions.

Once you have set the relevant properties for your exam, click on 'Save' button. You are then returned to the 'Exam Wizard' window (Image 39.3) where the title of your newly created exam is displayed on the left-hand side.

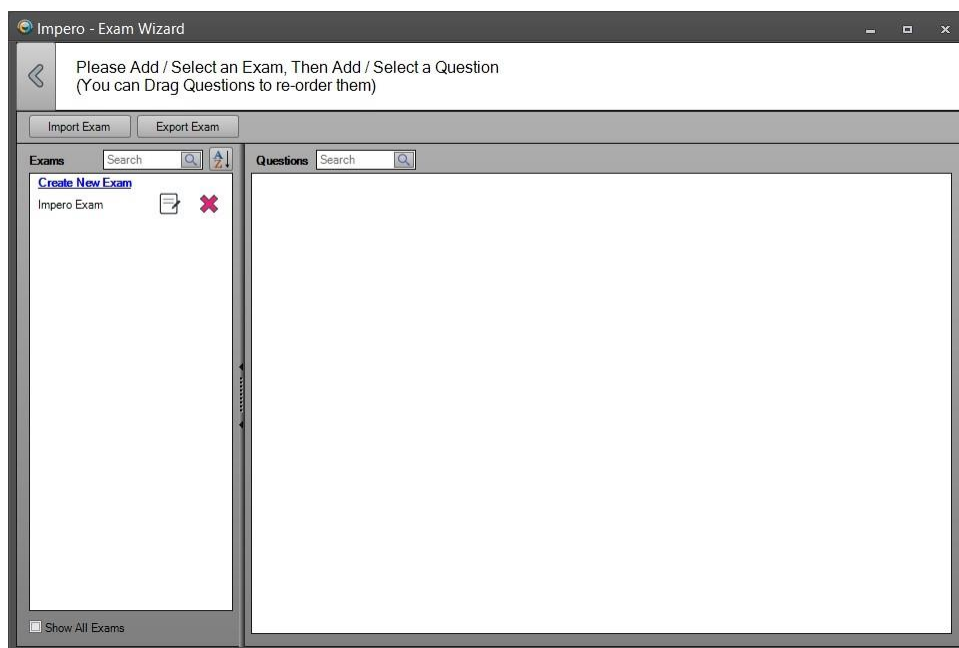


Image 39.3 - Exam Wizard

Now that your exam is created, you can begin to add questions to the exam.

2.4.3.2 Create Questions

Click on your exam name in the left-hand panel of the Exam Wizard. You then see a 'Create New Question' link become available on the right-hand side of the window (Image 40).

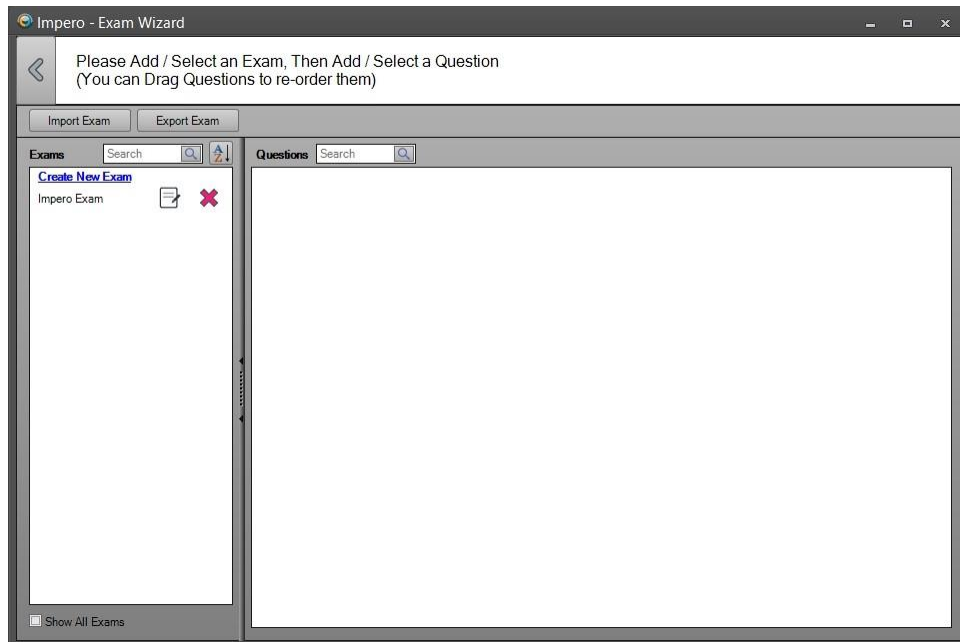


Image 40 - Exam Wizard

Click on the 'Create New Question' link. You then see a list of the different question types that you can add to your exam (Image 40.1).

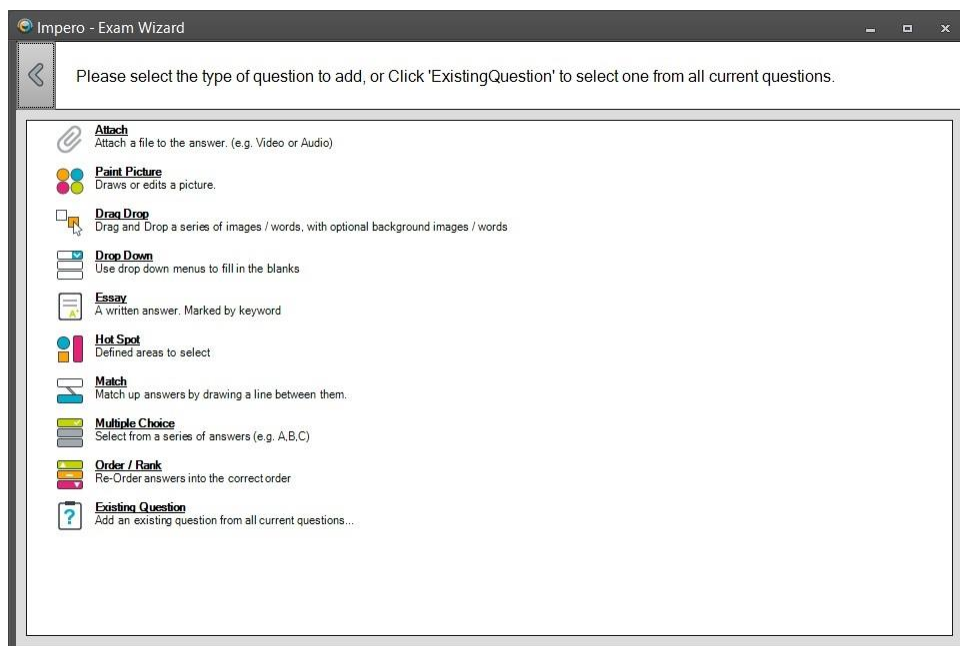


Image 40.1 - Questions

Click on the question type that you wish to add to your exam. The next window varies depending on which question you chose to add.

2.4.3.2.1 Attach

Use this question type in order to set up a question that contains an attachment. You can attach a file to the question, i.e., a video or audio file, or you can ask for the exam participant to answer by providing an attachment.

1. Click on the 'Attach' question type link.
2. In the following window, enter the question text.
3. You can also add an attachment to the question by clicking on the 'Add Attachment' button in the bottom right-hand corner of the window.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the file that you wish to import into the Exam Module and click 'Open'.
 - iii. You then see a thumbnail and the filename of the file you imported in the 'Add / Import Attachment' window.
 - iv. Select the file you wish to attach to your exam and click on the 'Add' button.
4. A 'View Attachments' button is displayed on the right-hand side of the screen where you can see which files are attached to the question.
5. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
6. Click on 'Preview' to see how your question is displayed to the exam participant or click on 'Save' to save the changes that you made.
7. The exam participant has the option to add an attachment to their answer.

2.4.3.2.2 Paint Picture

Use this question type in order to set up a question that requires the exam participant to draw a picture as the answer they provide.

1. Click on the 'Paint Picture' question type link.
2. In the following window, enter the question text.
3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
4. Click on the 'Palette Edit' button to continue designing the question.

5. In the following window, you are able to set up the drawing colours that are available to the exam participant when they answer the question.
6. To remove a colour, select the corresponding square on the left-hand side of the window, which loads that colour in the bottom panel of the window. Click on 'Remove From Palette' to remove the colour from being available to the participant.
7. To add a new colour, select your colour from the colour hex in the bottom left-hand corner of the window. Once you are satisfied with the colour you selected, click on the 'Add To Palette' button.
8. The colours and drawing tools that appear on the left-hand side of the window are those that are available to the participant.
9. You can remove the 'Fill' drawing tool by un-ticking the 'Enable Fill' tick box at the bottom of the window.
10. Click on the 'Background Image' button with the green arrow to move onto the next window. This gives you the option to add an image that is displayed in the background of the question.
11. Click on 'Preview' to see how your question is displayed to the exam participant or click on 'Save' to save the changes you have made.

2.4.3.2.3 Drag Drop

Use this question type in order to set up a question that requires the exam participant to drag and drop their answers into the correct position.

1. Click on the 'Drag Drop' question type link.
2. In the following window, enter the question text.
3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
4. Click on the 'Add Answers' button to continue designing the question.
5. In this window, you are required to add the answer options that displays to the participant. Click on the 'Add Answer Option' to open an answer field at the bottom of the screen.
6. Type the answer you wish to display into the text field.
7. Alternatively, you can click on the blue 'Add Image' thumbnail which opens the 'Add / Import Attachment' window.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.

- ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach to your question and click on the 'Add' button.
8. Repeat the above process to add further answer options. The answer fields can be moved around the screen to define where they are displayed to the participant.
9. Click on the 'Locations' button to continue designing the question.
10. Now you are required to define the areas into which you wish the exam participant to drag and drop their answers. Click on 'Add Answer Location' to add a new field to the screen, which is displayed in blue; click on this button until you have the required number of locations on screen.
11. You can click and drag the blue location fields onto whichever area of the screen you want them to appear to the participant.
12. Click on the 'Correct Answers' button to continue designing the question.
13. Now you are required to drag the answer fields into the correct locations on the screen. Do this by dragging the answer options you added in step 5 (outlined in black) onto the appropriate answer location (outlined in blue).
14. There are two further options at the bottom of this window:
- Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam are automatically marked based on the correct answers you have provided.
- Must get all correct - This box is only available if you have chosen to have the question automatically marked. If this option is selected, the exam participant must have every drag and drop option correct in order to gain a mark. If the option is un-ticked, they receive a mark for each drag and drop they place correctly.
15. Once you have placed all the correct answers and set the marking options, click on the 'Background Items' button.
16. This window allows you to add fixed items to your layout (optional). Click on the 'Add Fixed Item' button to add the fixed field which is displayed with a green outline. Click on the button till you have the required number of items on your screen and drag and drop them onto the desired location. These items are displayed on the participants screen but they are unable to move or edit them.
17. Click on the 'Background Image' button with the green arrow to move onto the next window. This gives you the option to add an image that is displayed in the background of the question.

18. Click on 'Preview' to see how your question are displayed to the exam participant or click on 'Save' to save any changes.

2.4.3.2.4 Drop Down

Use this question type in order to set up a question that requires the exam participant to select the correct answer from a dropdown list of options.

1. Click on the 'Drop Down' question type link.
2. In the following window, enter the question text.
3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
4. You also have the option to add an attachment to the question by selecting the 'Add Attachment' button.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach to your question and click on the 'Add' button.
5. Click on the 'Define' button to continue designing your question.
6. On the next window, type in the text that you wish to display to the user. Press 'Enter' at any point in the text if you want to start on a new line.
7. Double-click on any word that you wish to turn into a drop-down list of options. This opens a new panel, where you can click on the 'Add Item' button in order to add to the options that are displayed in the drop-down list.
8. Put a tick next to the drop-down option that is the correct answer.
9. Once you have specified all your drop-down options, you can configure the marking options for the question:

Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam are automatically marked based on the correct answers that you provided.

Must get all correct - This box is only available if you have chosen to have the question automatically marked. If this option is selected, the exam participant is required to have every drop-down option correct in order to gain a mark. If the option is un-ticked, they receive a mark for each drop-down they place correctly.

10. Click on the 'Background Image' button with the green arrow to move onto the next window. This gives you the option to add an image that is displayed in the background of the question.
11. Click on 'Preview' to see how your question is displayed to the exam participant or click on 'Save' to save the changes you have made.

2.4.3.2.5 Essay

Use this question type in order to set up a question that requires a written answer from the exam participant.

1. Click on the 'Essay' question type link.
2. In the following window, enter the question text.
3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit'. You can then enter the time length (hh:mm:ss) for this particular question.
4. You also have the option to add an attachment to the question by selecting the 'Add Attachment' button.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach to your question and click on the 'Add' button.
5. Click on the 'KeyWords' button in order to continue designing the question.
6. In this window you can specify keywords that the participant is required to use within their answer text in order to gain marks. Click on the 'Add' button at the bottom of the screen to add a keyword.
7. Type the keyword into the available field. You can add multiple keywords if you wish or select a keyword and click on the 'Remove' button in order to delete it.
8. Once your keywords are set, you can configure the marking options for the question:

Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam is automatically marked based on the keywords you have provided.

Must get all correct - This box is only available if you chose to have the question automatically marked. If this option is selected, the exam participant is required to

match every keyword in order to gain a mark. If the option is un-ticked, they receive a mark for each keyword they match.

9. Click on the 'Template' button to continue designing your question.
10. In this window you can add text that is displayed to the exam participant as a starting point to their answer.
11. Click on 'Preview' to see how your question is displayed to the exam participant or click on 'Save' to save the changes you have made.

2.4.3.2.6 Hot Spot

Use this question type in order to set up a question that requires the exam participant to locate a pre-defined 'Hot Spot' area.

1. Click on the 'Hot Spot' question type link.
2. In the following window, enter the question text.
3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
4. Click on the 'Background Image' button in order to continue designing the question.
5. On this screen you can add the image on which the hot spot is defined. Click on the 'Add Background Image' button in order to open the 'Add / Import Attachment' window.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach to your question and click on the 'Add' button.
6. Once your background image is set, click on the 'Add Answers' button.
7. In this window you can define hot spots on your image. Click on the 'Add Hot Spot' button at the bottom of the window. You can click this multiple times to add more than one hot spot.
8. In order to draw your hot spots, click on the 'Draw' button at the bottom of your screen. With 'Draw' selected, you can then define an area which contains a hot spot. Click within your image to define a point and click again to add further points until you have created the desired area. You are required to have a minimum of three points in order to complete an area, and it is necessary that you put the points in a continual direction (i.e., clockwise or anti-clockwise) for the hot spot to be correctly defined. Once your hot spot is defined, click on the 'End' button at the bottom of your screen. The hot spot can be any shape that you wish to create.

9. You can edit hot spots by clicking on the 'ReDraw' button or create further hot spots by clicking another 'Draw' button. Hot spots can be overlapped if necessary.
10. Once your hot spots are created, click on the 'Correct Answers' button at the bottom of the screen.
11. In this window you can specify which of your hot spots is the correct answer. Click on your hot spot on the image in order to mark it as correct; the hot spot is then display in a broken outline.
12. Once the correct hot spots are set, you can configure further options for this question:

Select from the drop-down list how you wish the hot spot to appear to the exam participant:

Hot Spot Invisible - The hot spot is not display on the image to the participant; they only see an 'X' where they clicked and can only click up to the maximum selection amount.

Hot Spot Outline only Drawn - The outline(s) that you drew in step 8 is displayed on the image to the participant. Hot Spot Drawn Filled in - The outline(s) that you drew in step 8 is displayed and also filled in on the image to the participant.

Max Selections - Set how many hot spots the participant can select. By default, there is no limit, but you can modify this by clicking on the 'Unlimited Choices' button and entering the number of hot spots you wish to permit for selection. The number you enter here is the number of hot spots the participant are allowed to choose.

Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam is automatically marked based on the correct hot spots you have defined.

Must get all correct - This box is only available if you have chosen to have the question automatically marked. If this option is selected, the exam participant is required to select every correct hot spot in order to gain a mark. If the option is un-ticked, they receive a mark for each hot spot they correctly select.

13. Once you have defined the correct hot spots and configured the additional options, click on 'Preview' to see how your question is displayed to the exam participant, or click on 'Save' to save the changes you have made.

2.4.3.2.7 Match

Use this question type in order to set up a question that requires the exam participant to match two fields together by drawing a line between them.

1. Click on the 'Match' question type link.
2. In the following window, specify the question text.

3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
4. Click on the 'Add Answers' button in order to continue designing the question.
5. In this window you can specify all the fields that are displayed to the exam participant. Click on the 'Add Item' button at the bottom of the screen in order to add a new field. You can click on this multiple times until you have all the fields you require.
6. Type into the text area to edit what is displayed on the screen to the exam participant.
7. Alternatively, you can click on the blue 'Add Image' thumbnail which opens the 'Add / Import Attachment' window.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach to your question and click on the 'Add' button.
8. You can click and drag the text/image fields around the screen in order to set where they are displayed to the participant.
9. Click on the 'Correct Links' button to continue editing your question.
10. On this screen you can drag a line from one field to another in order to define it as a correct link. In order to unset all links that you created, click on the 'Clear Matches' button. If you wish to remove just one specific link, right-click on the link arrow and select 'Delete'.
11. Once the links are set, you can configure the marking options for this question:

Max Choices - Set how many links the participant can define per field. By default, there is no limit, but you can modify this by clicking on the 'Unlimited Choices' button and entering the number of links you wish to set into the available field. The number you enter here is the number of links the participant are allowed to create from each text/image field.

Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam are automatically marked based on the correct links you defined.

Must get all correct - This box is only available if you chose to have the question automatically marked. If this option is selected, the exam participant is required to match every correct link in order to gain a mark. If the option is un-ticked, they receive a mark for each link they match.

12. Once you set the correct links and your marking options, click on the 'Background Image' button. This gives you the option to add an image that is display in the background of the question.
13. Click on 'Preview' to see how your question is displayed to the exam participant or click on the 'Save' button to save the changes you have made.

2.4.3.2.8 Multiple Choice

Use this question type in order to set up a question that requires the exam participant to select the correct answer from a selection of choices.

1. Click on the 'Multiple Choice' question type link.
2. In the following window, enter the question text.
3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.
4. Click on the 'Add Answers' button in order to continue designing the question.
5. In this window you can specify all the answer options that are displayed to the exam participant. Click on the 'Add Choice' button in order to add a new answer field. You can click on this multiple times until you have all the fields you require.
6. Type into the text area to edit the answer field that is displayed on the screen to the exam participant.
7. Alternatively, you can click on the blue 'Add Image' thumbnail which opens the 'Add / Import Attachment' window.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach as your answer and click on the 'Add' button.
8. Once you created all the possible answer options, click on the 'Order Answers' button.
9. On this screen you can click and drag on any of the answer fields in order to change the order in which they are displayed to the participant.
10. Once your order is set, click on the 'Correct Answers' button.

11. Click on the answer that is correct. It is then displayed in this window with a green tick to signify the correct answer. You can define more than one correct answer by selecting multiple answer fields.

12. Once the correct answer is set, you can configure the marking options for this question:

Max Selections - Set how many answers the participant is allowed to select. By default, there is no limit, but you can modify this by clicking on the 'Unlimited Choices' button and entering the number of answers you wish to permit. The number you enter here is the amount of answers the participant are allowed to choose from the selection.

Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam are automatically marked based on the correct answers you have defined.

Must get all correct - This box is only available if you have chosen to have the question automatically marked. If this option is selected, the exam participant is required to match every correct answer in order to gain a mark. If the option is un-ticked, they receive a mark for each answer they correctly choose.

13. Once you have set the correct links and your marking options, click on the 'Background Image' button. This gives you the option to add an image that is displayed in the background of the question.

14. Click on 'Preview' to see how your question is displayed to the exam participant or click on 'Save' to save the changes you have made.

2.4.3.2.9 Order/Rank

Use this question type in order to set up a question that requires the exam participant to re-order a selection of answers into the correct order.

1. Click on the 'Order / Rank' question type link.

2. In the following window, enter the question text.

3. You can specify a time limit for the individual question by clicking on the 'Unlimited Time' button to toggle it to 'Time Limit', you can then enter the time length (hh:mm:ss) for this particular question.

4. You also have the option to add an attachment to the question by selecting the 'Add Attachment' button.

i. From the 'Add / Import Attachment' window, click on the 'Import' button.

ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.

iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.

- iv. Select the image you wish to attach to your question and click on the 'Add' button.
5. Click on the 'Add Answers' button in order to continue designing your question.
6. In this window you can specify all the answers that are displayed to the exam participant. Click on the 'Add Order' button in order to add a new answer field. You can click on this multiple times until you have all the fields you require.
7. Type into the text area to edit the answer field that is displayed on the screen to the exam participant.
8. Alternatively, you can click on the blue 'Add Image' thumbnail which opens the 'Add / Import Attachment' window.
 - i. From the 'Add / Import Attachment' window, click on the 'Import' button.
 - ii. This opens a Windows dialogue box. Navigate to the image that you wish to import into the question and click on 'Open'.
 - iii. You then see a thumbnail and the filename of the image you have imported in the 'Add / Import Attachment' window.
 - iv. Select the image you wish to attach as your answer and click on the 'Add' button.
9. Once you created all the possible answer options, click on the 'Start Order' button.
10. In this window you can click and drag the answer fields into the order that you want them to initially display to the exam participant. Alternatively, you can select the 'Randomize At Start' button at the bottom of the screen for the order to be selected at random for every participant.
11. Click on the 'Correct' button to continue designing the question.
12. In this window, click and drag the answers into the order that you wish to define as correct.
13. Once the correct answer is set, you can configure the marking options for this question:

Turn Auto-Marking Off and Mark Manually after the exam - Tick this box if you wish to manually mark the exam when the participant has completed it. Leaving it un-ticked means that the exam is automatically marked based on the correct order you have defined.

Must get all correct - This box is only available if you have chosen to have the question automatically marked. If this option is selected, the exam participant must have every answer in the correct order in order to gain a mark. If the option is un-ticked, they receive a mark for each answer they put into the correct location in the order.
14. Once you set the correct links and your marking options, click on the 'Background Image' button. This gives you the option to add an image that is displayed in the background of the question.
15. Click on 'Preview' to see how your question is displayed to the exam participant or click on 'Save' to save the changes you made.

2.4.3.2.10 Existing Question

Use this question type in order to use a question that has already been created in your exam.

1. Click on the 'Existing Question' question type link.
2. In the following window you see a list of all existing exams and all the questions belonging to those exams.
3. To select one of these questions for use, click on the question you wish to use.
4. The question then opens up on your screen. You can navigate through the question details to make any modifications you wish. Once an 'Existing Question' is added to your current exam, it is saved as part of this exam. Any changes that you make does not affect the original exam that you copied the question from.
5. Once you are satisfied with the question content, click on 'Preview' to see how your question is displayed to the exam participant, or click on 'Save' to save the changes you have made and add the question to your exam.

2.4.3.3 Send Exam

Once you have finished adding all the questions you wish to use in your exam, you are able to deploy the exam to students.

Ensure that all the users that you wish to send your exam to are [selected](#) in your Impero Console window. You are then required to return to the first screen of the Exam Wizard, which you can access by selecting 'Exam Module' from the 'Action' toolbar, or if you already have the Exam Wizard open, by clicking on the backwards green arrow in the top left-hand corner of the window until you return to the home screen (Image 41).

From the home screen, click on the 'Send Exam' link.

You then see a new window where you see a list all of the exams you have created in the Exam Module (Image 41).

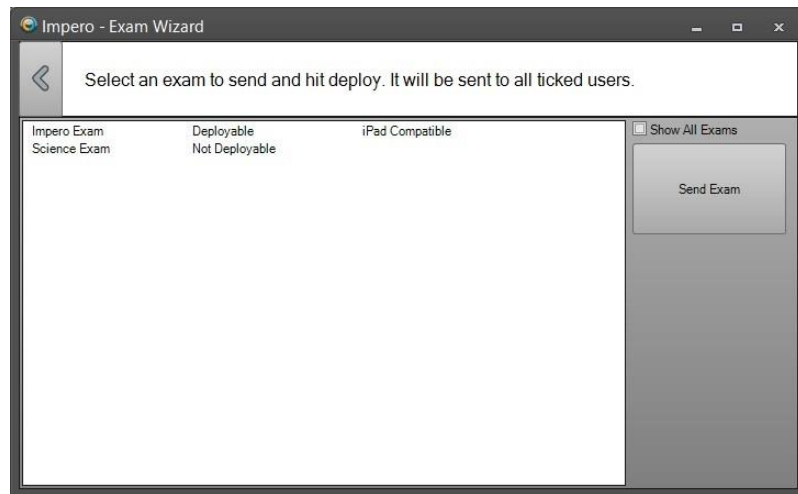


Image 41 - Send Exam

If you tick the 'Show All Exams' button on the right-hand side, you can see a list of all exams created within the Exam Module.

If your exam is completed and ready to send, it says 'Deployable' to the right-hand side of the exam name. If your exam contains only 'Multiple Choice' and 'Essay' type questions, you also see a field that says 'iPad Compatible' which means that the exam can be deployed to the Impero iPad App.

If your exam says 'Not Deployable', it is for some reason not ready to be sent to users. Navigate back to the 'Exam Designer' where you see the reason for the exam not being ready (Image 41.1).

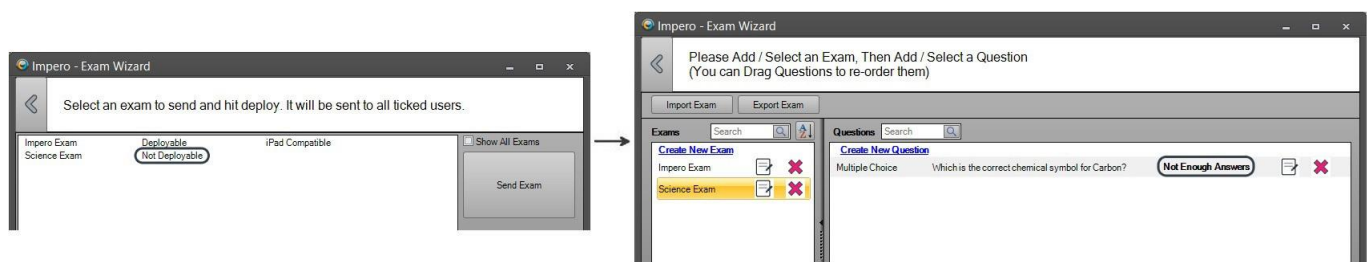


Image 41.1 - Undeployable Exam

You can then edit the exam to fix any issues and ensure that it is 'deployable'.

Once you have all the necessary users ticked in the Impero Console, and your exam has a status of 'Deployable', click to select your exam and press the 'Send Exam' button.

You are then prompted to browse to a folder in which the results of the exam are saved. A new folder is created under your selected folder called 'Impero Exam_Results Date_Time' so that you can easily identify an exam at a later date. This allows you to re-import the results of the exam at any time in the future.

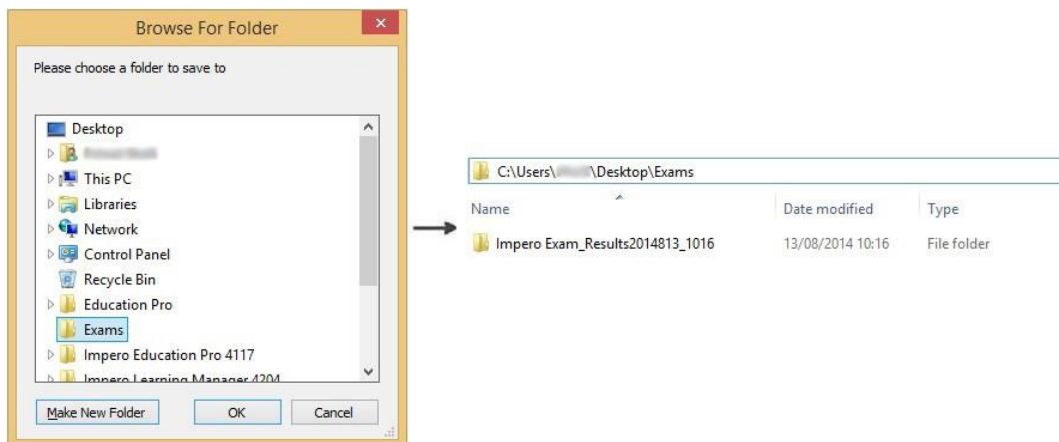


Image 41.2 - Exam Folder

The users that were selected in your Console window now receive the exam on their computers.

2.4.3.4 Exam Participant

The users that were selected in your Impero Console when you sent the exam can now see the 'Exam Taker' window appear on their screens. The user is required to click on the 'Play' button in the middle of this window in order to commence their exam. The exam participant then sees the questions that were sent to them and the answer options that were provided (Image 42).

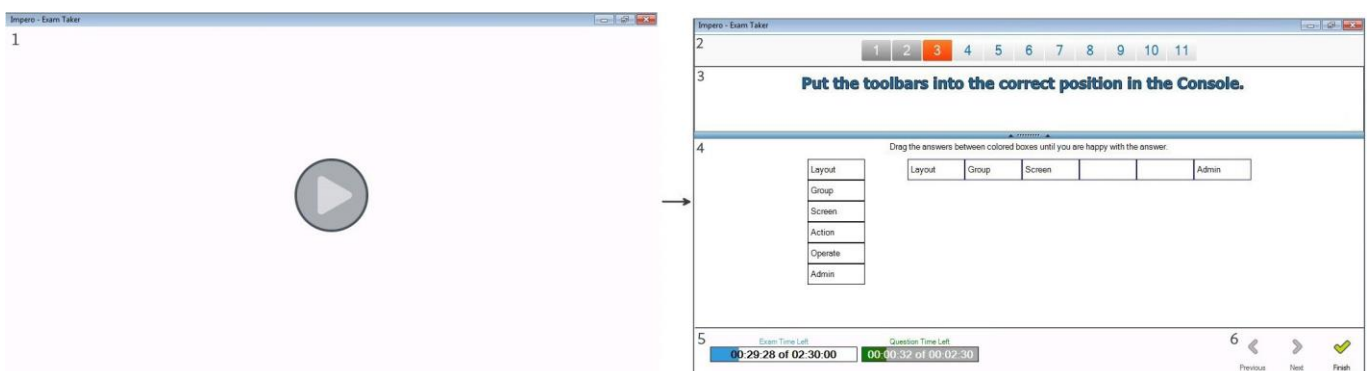


Image 42 - Exam Taker

1 This is the window that the exam participant sees once you deployed the exam. They are then required to click on the 'Play' icon in order for the exam to commence.

2 The number of questions that are in the exam. The number that is highlighted orange is the question that is currently active. The participant can click on any of the numbers to navigate to that particular question, only if they are permitted to go back to previous questions in the 'Exam Properties'.

- 3 - This field contains the question text for the selected question, as well as any files that may be attached to the question.
- 4 - This is the answer field for the selected question. The content of this field varies depending on the question type that is currently active.
- 5 - This field displays the time that has lapsed in the exam and the total time that is permitted for the exam (hh:mm:ss). A progress bar also displays how far through the exam the participant currently is and turns red as the exam nears an end. If you have specified a time limit on particular questions, a second progress bar is displayed the time remaining for that question.
- 6 - Use the 'Previous' and 'Next' icons to navigate between questions in the exam. Once the participant has completed their answers, they can then click on the 'Finish' icon to end the exam.

2.4.3.5 Exam Feedback

While users are participating in the exam, the 'Exam Module' window displays live feedback from the exam in progress (Image 43).

User Name	Computer Name	Start Time	Time Taken	Current Question	Mark	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
bmatthews	IT01-02	12 Mar 2015 14:34:55	00:04:18	Q9	6	Green	Yellow	Green	Green	Green	Green	Green	Blue	Grey	Grey	Grey
sjones	IT01-01	12 Mar 2015 14:34:55	00:04:18	Q9	4	Green	Green	Red	Yellow	Red	Blue	Green	Green	Grey	Grey	Grey

Image 43 - Exam Feedback

Note: If you have chosen to randomise the order of questions, you see the results in the order that the questions were created in, not in the order in which they are displayed to the participants.

There are a number of columns of information that display here showing you information on the current exam as it progresses.

User Name

This column displays the user name of the exam participant.

Computer Name

This column displays the name of the computer on which the participant is taking the exam.

Start Time

This column displays the date and the time at which the participant began the exam.

Time Taken

This column displays the amount of time that the user has been active on the exam.

Current Question

This column displays the number of the question that the participant is currently active on.

Mark

This column displays the number of marks that the user has currently accumulated in the exam. This is dependent on how you have chosen to assign marks on each of the individual question types.

Note: This total mark considers any manual marks you have added while the exam is in progress, but please note that if a participant edits an answer that you already manually marked, your manual mark is lost.

Q - These columns display to you the status of each question that are deployed to the participant and how they are marked on those questions. You can double-click on any of these blocks in order to open a new window and view what answer the user has submitted on that question (Image 43.1).




Image 43.1 - Review Answer


- 1 - This field displays the question text of the question/answer that you have selected to review.


2 - This field displays the answer that is submitted by the exam participant. The content of this area varies depending on which question type you are currently reviewing.


3 - You can select from the drop-down box how many marks you wish to award to the exam participant based on the answer they have provided. You can also type into this area to award a custom number of marks for the answer. Click on 'Accept' to save the marks you have assigned, or 'Cancel' to disregard any changes that you have made.


There are five different coloured blocks that can appear in the progress window to tell you the status of each question:

 Correct - The green block indicates that the user has answered this question correctly based on the answer that you set when creating the question. You can double-click on the block to view the answer and modify the mark if necessary.

 Wrong - The red block indicates that the user has answered this question incorrectly based on the answer that you set when creating the question. You can double-click on the block to view the answer and modify the mark if necessary.

 Needs Marking - The yellow block indicates that this question requires manual marking. Double-click on the icon to view the answer that has been submitted and define how many marks the user has gained from their answer.

 Marked - The blue block indicates that this question has already been manually marked. You can double-click on the block to view the answer and modify the mark if necessary.

 Unanswered - The grey block indicates that the participant has not yet provided an answer to this question.

You can click on the 'End Exam' button at the bottom left-hand corner of the window at any time which ends the exam for all participants. You are also able to click on the 'Export Results' button which allows you to browse to a location to which you can save the exam results in CSV format.

The exam progress window (Image 43) remains active until the exam ends - either by all participants completing the exam, or by you clicking on 'End Exam'. This allows you to click on the backwards green arrow to navigate back to the Exam Wizard and view/edit existing exams while participants continue with the active exam. If you do navigate back to the Exam Wizard, you see an option labelled 'Show Current Exam' which takes you back to the live exam progress window (Image 43.2).

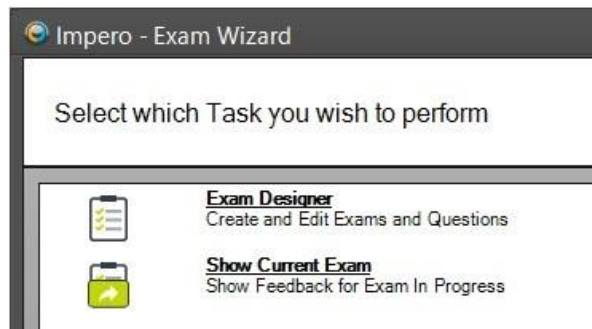


Image 43.2 - Show Current Exam

2.4.3.6 Open Previous Results

You can view previous exam results at any time providing you still have access to the folder in which the exam results were saved. Navigate back to the Exam Module home screen using the backwards green arrow in the top left-hand corner of the window or re-open the 'Exam Module' from the 'Admin' toolbar. From the home screen, select the 'Open Previous Exam Results' link. On the next screen, click on the 'Open Results' button which opens a new window from which you can browse to the folder containing the exam results. Select the folder and click on 'OK', which then opens the results from the selected exam.

You can still view submitted answers and edit the marks at this stage, which automatically saves the results back to the folder that was opened.

2.4.3.7 Offline Exam Module

There is an offline, standalone version of the Exam Module that you can create, edit and mark exams in, and later import back into the Impero Console. This enables you to potentially work on exams away from your establishment network, or on a computer at home. The Exam Module uses 'Impero Exam Store' (.IES) files to which the content of exams are saved; it is by importing and exporting these files that you are able to work on exams offline. It also uses 'Impero File Stores' (.IFS) to hold any attachments that you may have added to the exam.

You can launch the offline exam module by navigating to your Impero Client directory (usually C:\Program Files (x86)\Impero Solutions Ltd\Impero Client\) and locating the 'ImperoOfflineExam.exe' file. Double-click on this executable to launch the offline Exam Module (Image 44).

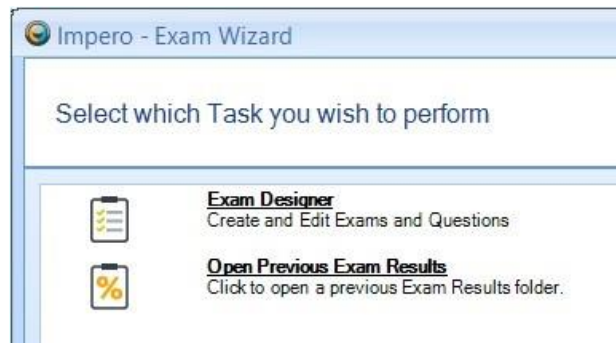


Image 44 - Offline Exam Module

Select the 'Exam Designer' link in order to work on an exam. You can either create a new exam to work on or modify an existing exam.

New Exam

If you wish to create and work on a new exam, select 'New'. In the new window, select a location to which you save this 'Exam Store' and give it a name. You are required to locate this file later when importing it back into the Impero Console to send to users. Once you saved your new Exam Store file, the option to create a new exam then becomes available (Image 44.1).

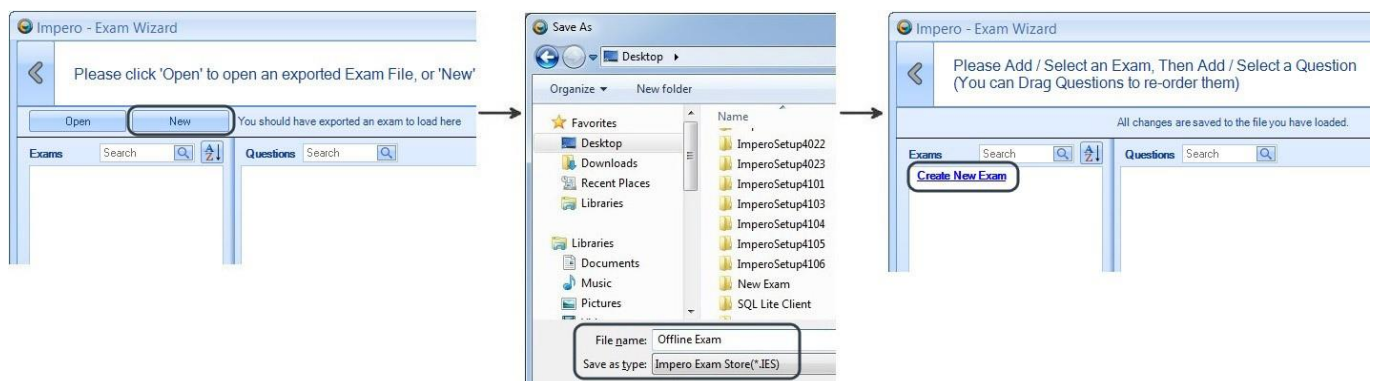


Image 44.1 - Offline Exam - Create New Exam

Select the 'Create New Exam' link in order to set up the properties of the exam and create questions. For information on setting these properties and creating questions, please refer back to the ['Exam Module'](#) section.

You can create multiple exams at this stage and they are all saved into the Exam Store you specified upon selecting 'New Store'. Any exams that you create and any further changes that you make to the exams are all saved back into the .IES file that you specified. Existing Exam

If you wish to work on an existing exam, you are first required to export it from the Exam Module in the Impero Console:

- 1) Select the 'Exam Module' from the 'Action' toolbar.
- 2) Click on the 'Exam Designer' link.

- 3) Select the exam that you wish to export from the list of the exams in the left-hand panel.
- 4) Click on the 'Export Exam' button.
- 5) Select a location to export the exam file to.
- 6) You then see a pop-up telling you 'Successfully Exported Exam'.
- 7) There a new folder is in your specified location that is named the same as your exam. You require this folder when choosing to work on an existing exam using the Offline Exam Module.

To work on an existing exam, select 'Load Store'. In the new window, navigate to the folder that you previously exported from the Exam Module in the Impero Console. Open this folder, select the 'ServerExamMassStore.IES' file, and then click on 'Open'. Your exam is then loaded into the exam list in the left-hand panel of the window (Image 44.2). You then can edit properties of the exam, edit any existing questions, and add and edit new questions to this exam in the same way as you would within the ['Exam Module'](#).

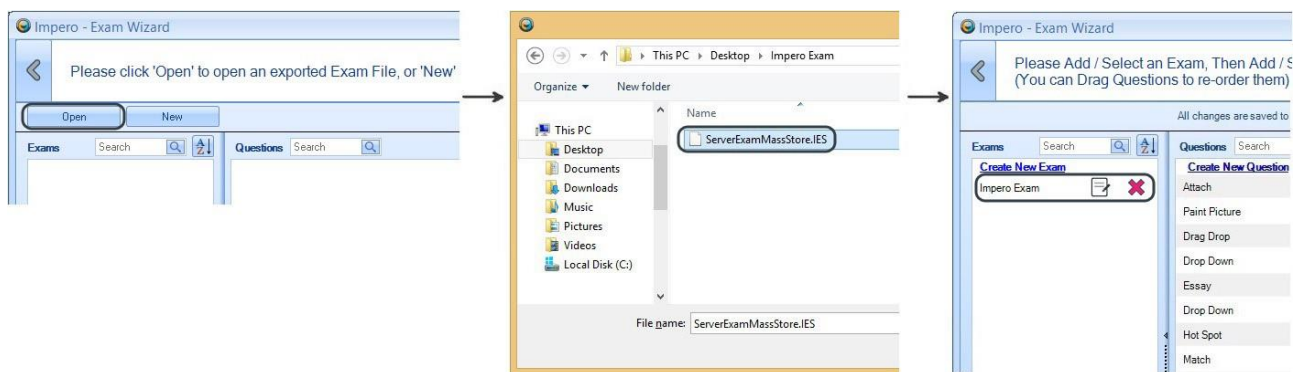


Image 44.2 - Offline Exam - Load Existing Exam

Any changes you make to this exam are automatically saved back into the .IES file that you loaded.

Re-Importing Exam

Once you have created and/or modified your exam offline, it can be later imported into the Impero Console for further editing or for deployment to users. In order to do so, go through the following steps:

- a) Select the 'Exam Module' from the 'Action' toolbar.
- b) Click on the 'Exam Designer' link.
- c) Click on the 'Import Exam' button.
- d) In the new window, navigate to the .IES file that you have saved your exam to.
- e) Select the .IES file and click on 'Open'.
- f) The exam is then loaded to the exam list on the left-hand panel of the window. You then can make further changes to the exam, or send the exam to users, as you would within the ['Exam Module'](#).

Note: The exam is imported as an entirely new exam. Therefore, if you have re-imported an exam that you previously exported, the original remains untouched, and you then see two exams in your exam list with the same name. You may at this stage wish to remove, or rename, the one of the two exams.

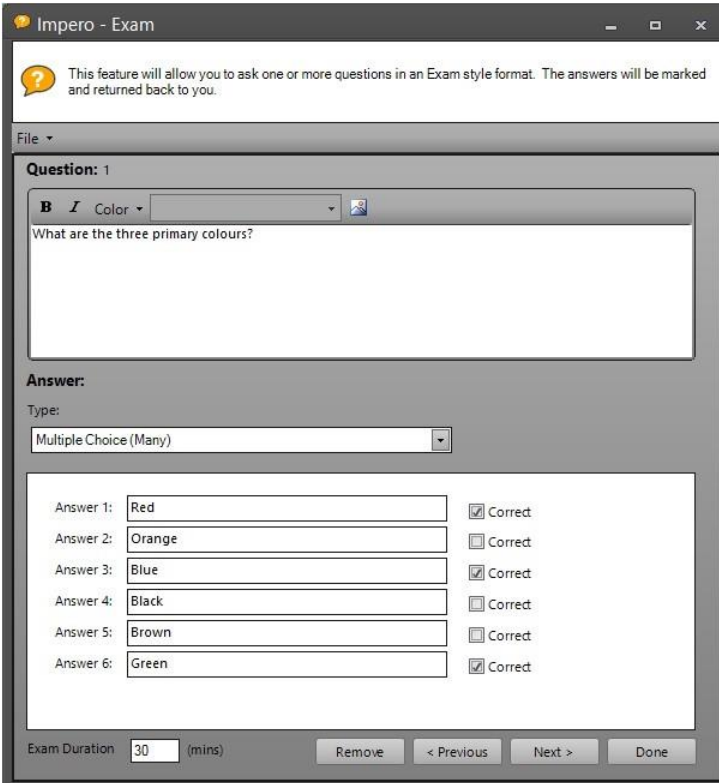
2.4.3.8 Old Exam Module

If you wish to use the previous Impero Exam Module (pre-version 4.1), you can revert to using it via a setting in the 'Console Access Rights' section of the Impero Server.

This module allows you to build an online exam with multiple choice and/or written questions.

How to create an exam beforehand

1. Make sure you do not have anyone selected and click on 'Exam Module' from the 'Action' toolbar.
2. Click on 'No' if it asks: 'No active computers are ticked. Do you wish to perform this operation to all computers in the current group?'.
3. Enter a question plus any additional formatting that you require (Image 45).
4. Pick the type of question you want:
 - Multiple Choice (1): Only one correct answer
 - Multiple Choice (Many): Maximum of 6 correct answers
 - Written: Maximum of 6 keywords or phrases
5. Then type in the answers in the text areas below.
6. Click on 'Next' to add a new question or 'Done' if you have finished.
7. Click 'on Yes' to save the exam.



The screenshot shows the 'Impero - Exam' window. At the top, there is a message: 'This feature will allow you to ask one or more questions in an Exam style format. The answers will be marked and returned back to you.' Below this is a 'File' menu. The main area is titled 'Question: 1' and contains a text editor with the question 'What are the three primary colours?'. Below the question is an 'Answer:' section with a 'Type:' dropdown set to 'Multiple Choice (Many)'. There are six answer fields, each with a 'Correct' checkbox. The answers are: Answer 1: Red (checked), Answer 2: Orange, Answer 3: Blue (checked), Answer 4: Black, Answer 5: Brown, and Answer 6: Green (checked). At the bottom, there is an 'Exam Duration' field set to 30 (mins), and buttons for 'Remove', '< Previous', 'Next >', and 'Done'.

Image 45 - Impero Exam

The 'file' menu in the top left-hand corner of the 'Impero - Exam' window allows you to 'Save' an exam for later use or 'Open' a previously saved exam.

The following text area allows you to specify the text of each question that you wish to add to the exam you are creating. Above the text are additional options that enable you to format your question text and add images if required. There are then three answer types that you can select from in a drop-down menu:

Multiple Choice (Many)

Multiple answers with more than one correct answer.

Multiple Choice (1)

Multiple answers with only one correct answer.

Written

Assign answer keywords which are matched against the words in the written answer.

The area at the bottom of the window changes based on your selection in the drop-down menu, allowing you to enter answer options (for multiple choice based answers) or keywords (for written answers) that the participant must match in their answer in order to gain marks.

Further options enable you to add an exam duration in minutes (or leave this to '0' to set an unlimited duration), browse through your exam questions, remove questions or complete the exam.

How to distribute an exam

1. [Select](#) the required users you wish to receive the exam.
2. Click on the 'Action' toolbar and click on 'Exam Module'.
3. You are presented with the exam dialogue window (Image 45).
4. Click on 'File' from the menu and select 'Open'.
5. Locate the exam you created earlier (Example: Test1.exam).
6. The Exam window opens displaying the first question.
7. To make this a timed exam, enter the number of minutes in the 'Exam Duration' box in the lower left-hand corner (zero is unlimited).
8. Click on the 'Done' button once you are ready for the exam to begin.
9. This then opens the 'Impero - Exam' dialogue window (Image 45.1) on your desktop and open the 'Impero - Take Exam' dialogue box on the computers that you selected.

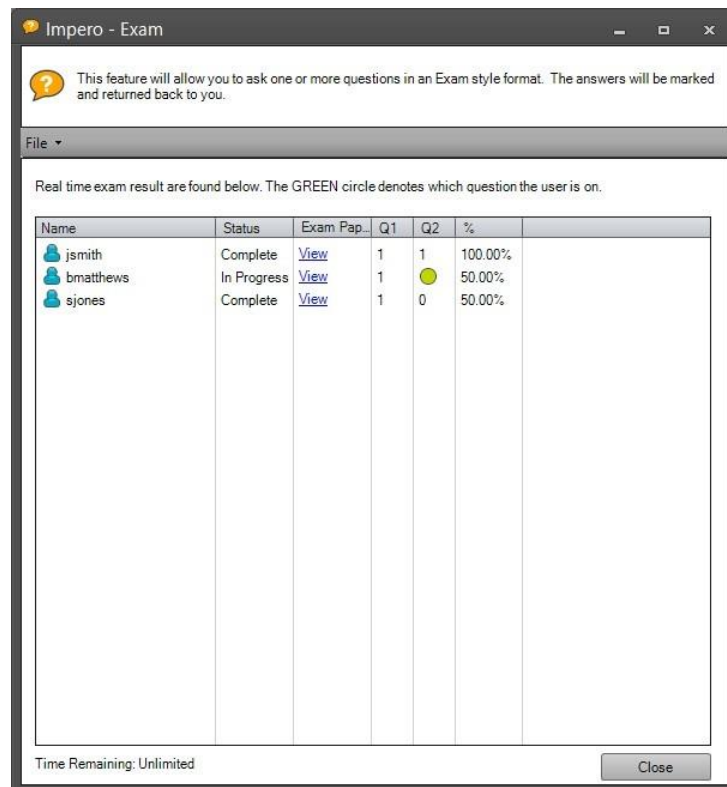


Image 45.1 - Admin Exam View

10. The 'Impero - Exam' dialogue window (Image 45.1) displays a list of exam takers along with information on: exam status, progress, percentage and the ability to view the user's exam.
11. Once the test is complete, click on 'Save' from the File menu. This saves the file in CSV format.

2.4.4 Quick Question

You can use the 'Quick Question' feature to send questions to users and ascertain quickly if they understood your lesson, or to deliver a polling question:

- Select the users you wish to ask a quick question
- From the 'Action' toolbar, select the 'Quick Question' button

- In the new window, type in the question that you wish to ask (Image 46)

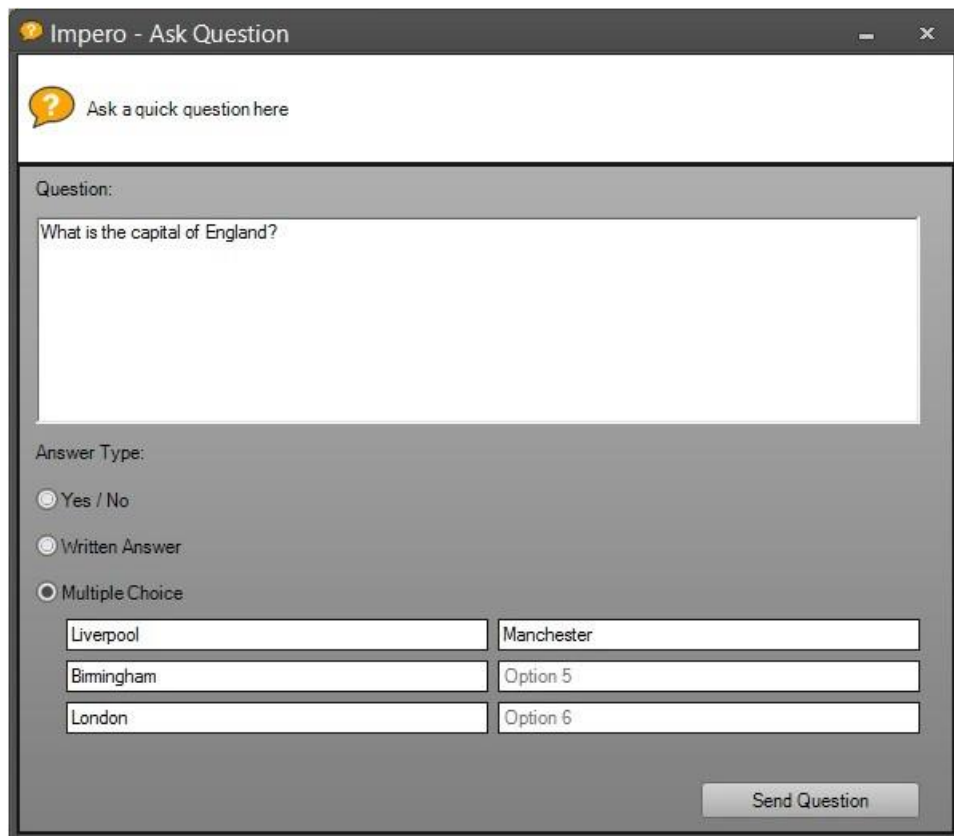


Image 46 - Quick Question

- You can then select what type of answer you wish to prompt for:

Yes/No

Select this option to give the user the option to answer with either a 'Yes' or a 'No'.

Written Answer

Select this option to give the user a text area into which they can type in their answer.

Multiple Choice

Select this option to give the user up to six options from which they can select the correct answer. Type in the answer options that you wish to give the user (Image 46). Leave any answer fields you do not wish to use blank.

- Once you have set up your question, click on the 'Send Question' button
- The selected users receives the question on their desktop (Image 46.1)

- Meanwhile, you see a window display live feedback on their question (Image 46.1)

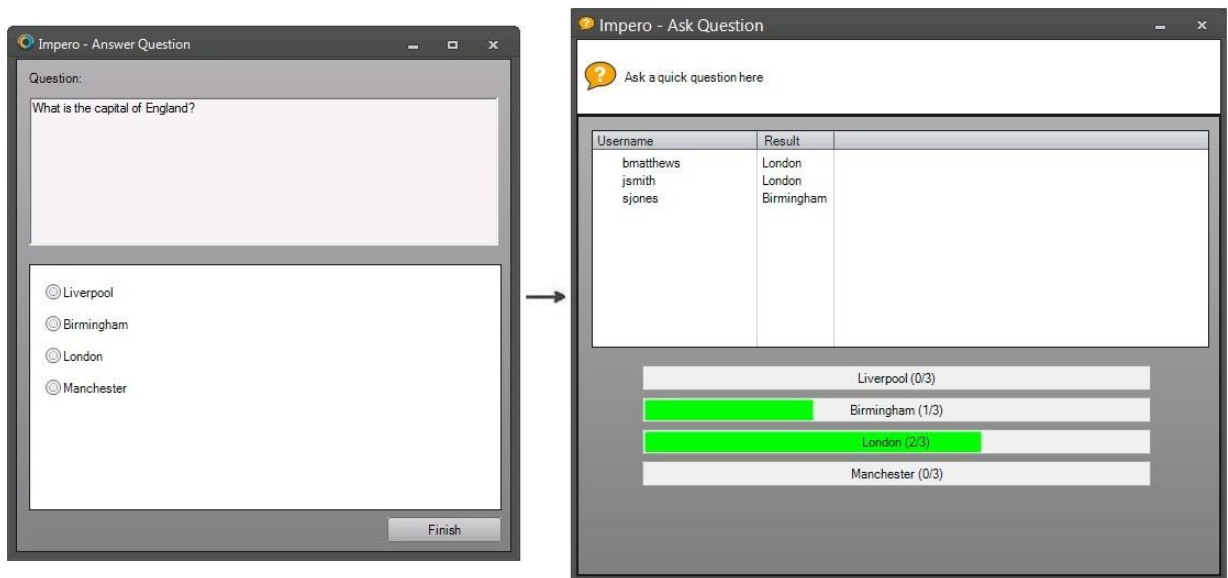


Image 46.1 - Quick Question

2.4.5 Send File

This function allows you to send file(s) or folders to users, and even open files for them.

- In the Console, select the user(s) that you wish to send your files or folders to.
- Click on the 'Action' toolbar and select 'Send File'.
- In the left-hand panel, browse to the files or folders that you wish to send (Image 47).
- You can hold the 'CTRL' key on your keyboard and click on files to select multiple files. On the right-hand side, choose from the following options:

Save the files to users home directory (under ImperoDownloads)

Selecting this option saves your selected files to a folder called 'ImperoDownloads' in the selected users' home directory.

Save file to the following location

If you wish to save the files to a different location, enter the path here.

Run the file after sending

Select this option to open the file on the users screen once you have sent it.

- Click on the 'Send' button send the selected files or folders to the user.

- A progress bar at the bottom of the window indicates the current status (Image 47).

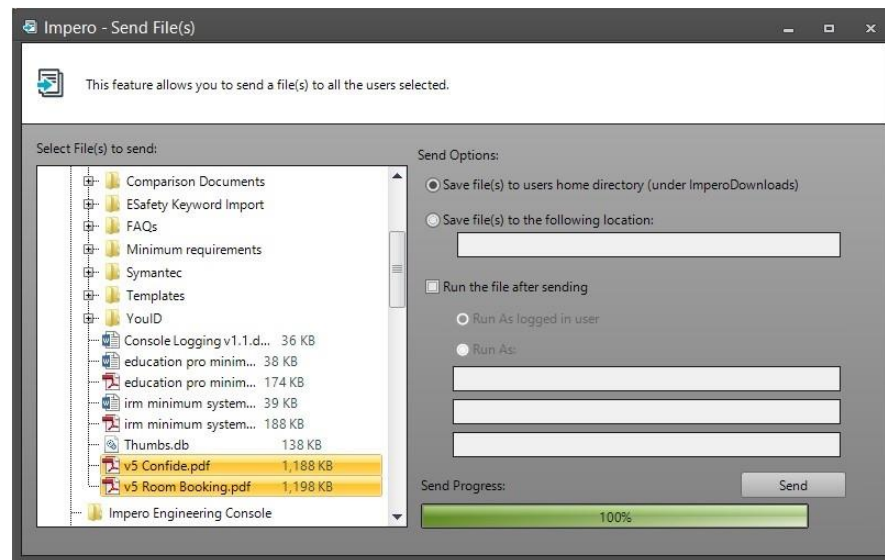


Image 47 - Send File

2.4.6 Collect Files

This function allows you to collect file(s) or folders from any number of remote users.

- In the Console, select the users that you wish to collect files from .
- From the 'Action' toolbar, click on 'Collect Files'.
- The new window allows you to specify where you wish to collect files to on your computer, from two options:

'My Documents' area

This is the default selection and saves collected files within your 'My Documents' folder. A new folder called 'ImperoDownloads' are automatically created in this area, inside of which another new folder is created and named with today's date. Collected files are displayed in this folder.

Your home drive or other location

Select this option if you wish to specify a different directory to collect files to. Click on the 'Browse' button to locate the folder you wish to collect files to.

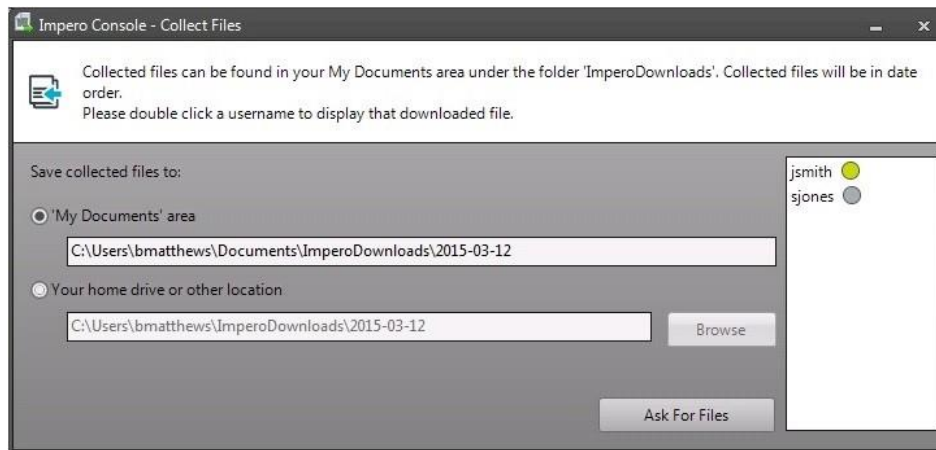


Image 48 - Receive File

- After selecting the collection location, click on the 'Ask For Files' button.
- You then see a list of users on the right-hand side (Image 48) that you asked to collect files from.
- A dialogue box is displayed on the user screen (Image 48.1).



Image 48.1 - My Documents

- Users can then locate and select the file(s) that you wish to collect and click on 'Send'.
- A green dot next to the username (Image 48) indicates that they successfully sent you files.
- A grey dot indicates you are still awaiting their file.
- A red dot indicates that the user closed the dialogue box without sending you a file.

- To view the files that you collected, double-click on the username in the 'Collect Files' window (Image 48), or navigate to the folder you initially specified before asking users for their files.
- Impero creates a folder based on today's date within 'ImperoDownloads' and create a sub-directory for each user that has sent a file called 'username-time'. This reflects the username of the person that has sent the file and the time at which they sent it. Within this folder are each of the files that the user sent (Image 48.2).

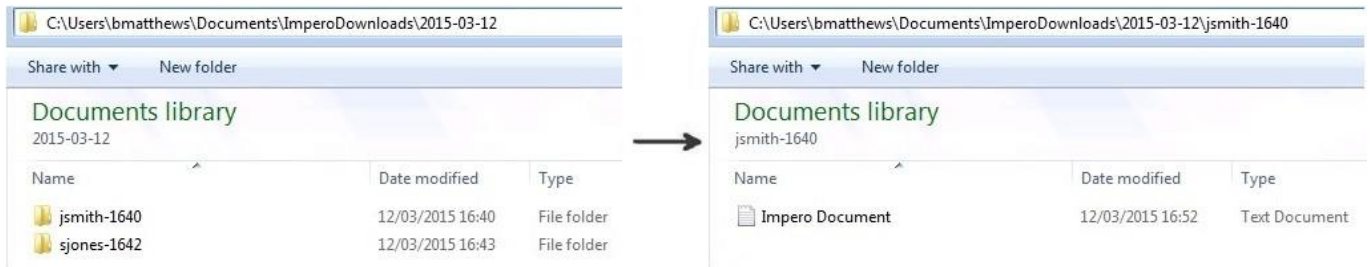


Image 48.2 - Collected Files

2.4.7 Run Website/File

The 'Run Website/File' feature allows you to quickly open a website, program or file on one or more computers at once. You are also able to configure global and personal 'favourites' that are available to use repeatedly.

Run File

- In the Console, select the users that you wish to run a website or file for.
- Select the 'Action' toolbar and click on 'Run Website/File'.
- A new window opens up, with the 'File' tab selected (Image 49).

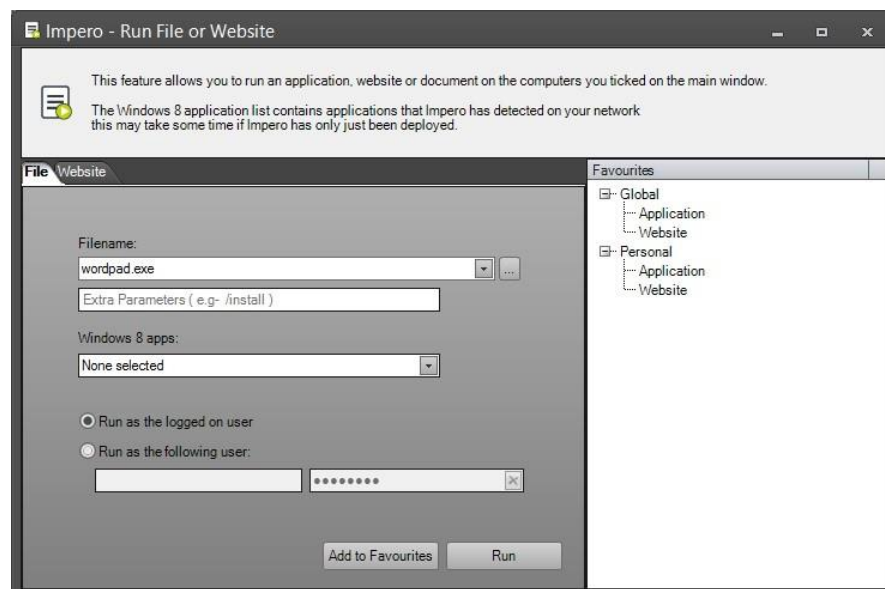



Image 49 - Run File

- You can open an application by typing the name of the file that you wish to run (i.e. notepad.exe, wordpad.exe, photoshop.exe).

- Alternatively, click on the  button to browse to a specific file that you wish to run on the selected computers. - Click the 'Run' button in order to launch your specified application or file on selected computers.
- You can click on the 'Add to Favourites' button to add your application or file to the 'Favourites' section on the right-hand side, saving it for repeated use.
- When saving a favourite, you are prompted to give it a name.
- It is then added under your 'Personal' favourites on the right-hand side.

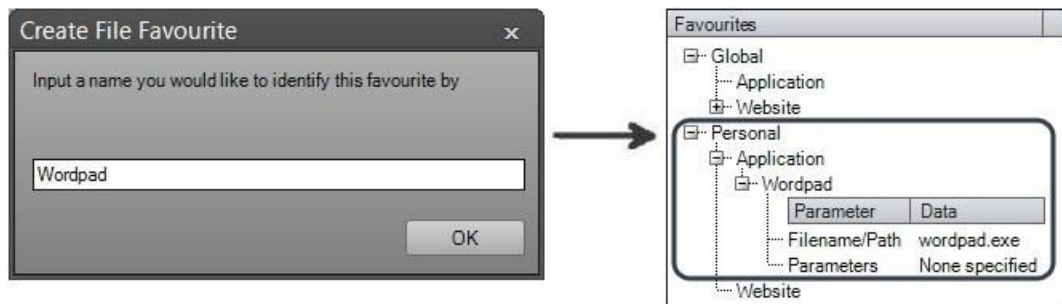


Image 49.1 - File Favourite

- You then can click on the favourite name to launch that application in future.
- In order to remove a favourite, right-click on it and select 'Remove'. Run Website

The same feature can be used to open a specified website for selected users:

- Click on the 'Website' tab (Image 49.2).

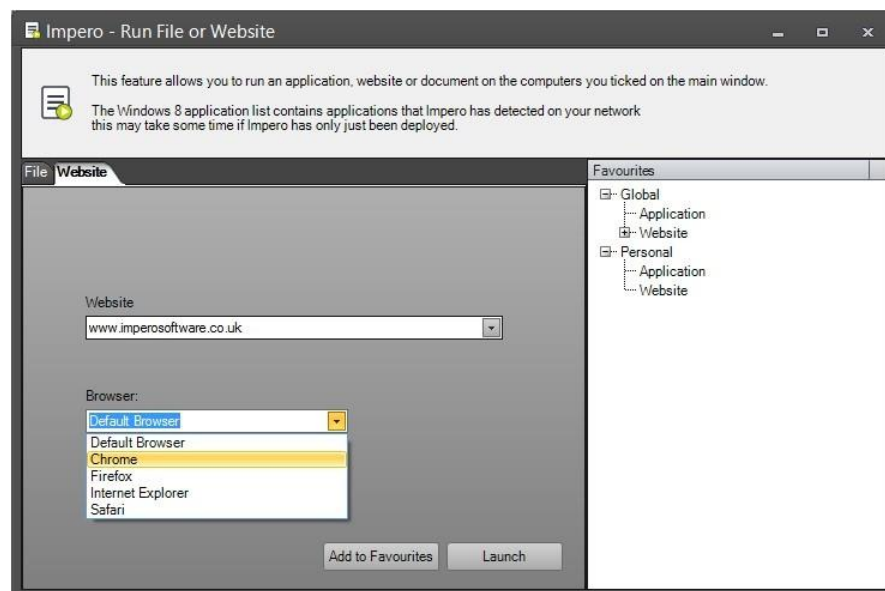


Image 49.2 - Run Website

- Type in the address of the website that you wish to run, ensuring you add the 'www.' prefix.
- Using the drop-down list, you are then able to specify which browser you wish to use to launch the website in. Click on 'Launch' to open the selected browser to the specified web address on selected computers.

- You can also select 'Add to Favourites' here to save the web address as a personal favourite (Image 49.3).

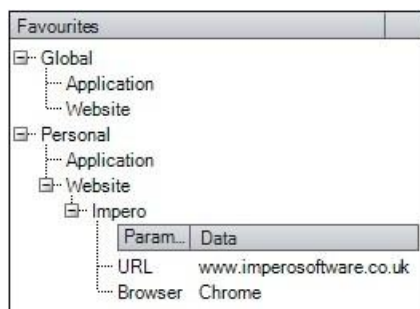


Image 49.3 - Global Favourite

- Click on the name of the favourite to load the details and then click on 'Launch' to open that website on any selected computers.

2.4.8 Assign Task

This feature allows you to assign tasks to users and monitor the status of the tasks.

- In the Console, select the users that you wish to assign tasks to.
- Click on the 'Action' toolbar and then select 'Assign Task'.
- This opens the 'Send Tasks' window, with the usernames of the selected users in the right-hand panel.

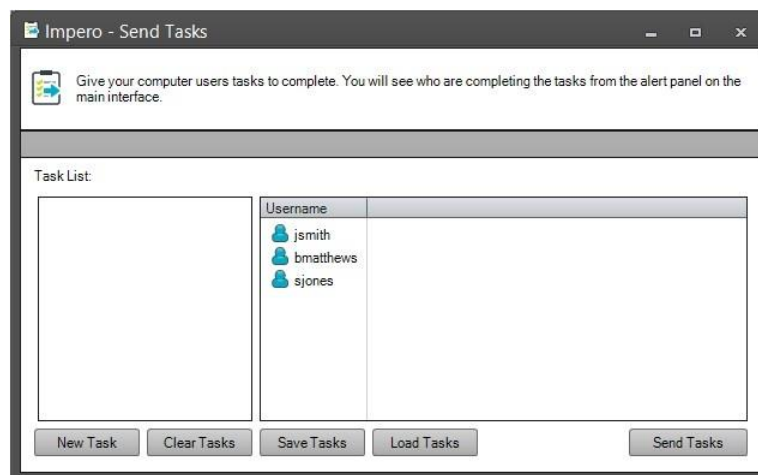


Image 50 - Assign Task

- Click on the 'New Task' button.

- Give your task a title and a description (Image 50.1).

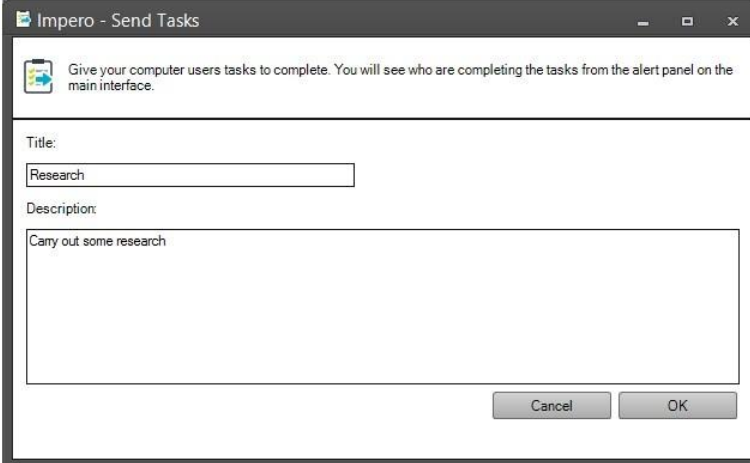


Image 50.1 - New Task




Image 50.2 - User View

- Click on 'OK' to save the task.
- Repeat the steps above to add further tasks.
- Once your task list is created, click on the 'Send Tasks' button.
- This then opens a 'Your Task' window on each selected user's screen (Image 50.2).
- The user can click on the task title in order to view the description.
- Once they completed the task, they can click on the tickbox.

- A green dot in the 'Send Tasks' window on your screen indicates the user completed the task (Image 50.3).
- Once the user ticked all their tasks, the 'Close' button becomes available, allowing the user to close the task window.

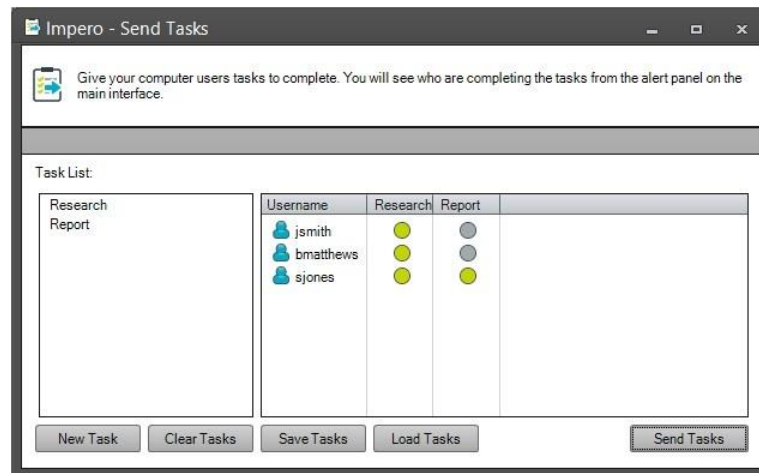


Image 50.3 - Steven has completed the task

- You can click on 'Clear Tasks' to remove all tasks and also user history.
- You can also create task lists in advance, and save it locally using the 'Save Tasks' button.
- This saves your task list in '.ITF' (Impero Task File) format to a location of your choosing.
- You can then re-load that task list at a later time by using the 'Load Tasks' button.

2.4.9 Log On/Off iOS Device

When you connect iOS devices to your Impero network, you are able to set a username against the device, allowing you to group devices together by user, and to view iOS activity logs by username as well as by device name.

In order to set a username against the iOS device, first select the device in your Impero Console. From the 'Action' toolbar, select 'Log On iOS Device'.

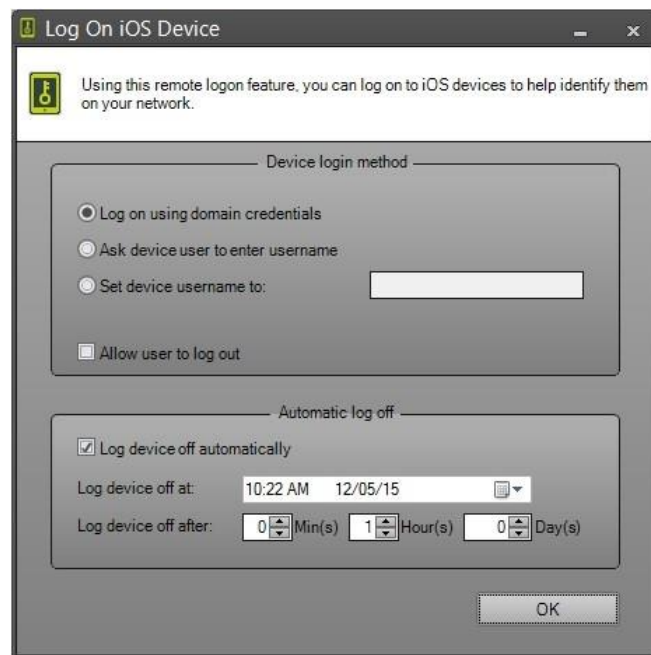


Image 51 - Log On iOS Device

There are a number of options you can choose from in this window.

Device login method

Log on using domain credentials

Select this option to prompt the iOS device user to log in using their Active Directory credentials. With this option selected, click on 'OK'. The iOS device user is then prompted to specify their username and password. Once they entered these details, you see their username displayed against the iOS device in the Console (Image 51.1).

Computer	User
<input type="checkbox"/> IT01-02	bmatthews (Bill Matthews)
<input type="checkbox"/> LIB-01	jsmith (Jessica Smith)
<input checked="" type="checkbox"/> iPad (C5SS-7SRU)	oedwards (Apple iPad Viewer)
<input type="checkbox"/> IT01-01	sjones

Image 51.1 - Logged On User - iOS

Ask device user to enter username

Select this option to prompt the iOS device user to enter their name on the device. With this option selected, click on 'OK'. The iOS device user is then prompted to enter their first and last names, which then is displayed against the device in the Console (Image 51.2).

Computer	User
<input type="checkbox"/> IT01-02	bmatthews (Bill Matthews)
<input type="checkbox"/> LIB-01	jsmith (Jessica Smith)
<input checked="" type="checkbox"/> iPad (C5SS-7SRU)	Olivia Edwards (Apple iPad Viewer)
<input type="checkbox"/> IT01-01	sjones

Image 51.2 - Logged On Name - iOS

Set device username to

Select this option to manually assign a name against the device. With this option selected, type in the username you wish to assign to the iOS device and click on 'OK'. The iOS device is then displayed in your Console with the assigned username against it.

Allow user to log out

Tick this option if you wish to give the iOS device user the ability to log out of the chosen log in session. The user then sees an additional icon within the Impero iOS Pro application which they can click on to end the logged in session.

Automatic log off

Once you have chosen your preferred authentication method to assign a user to an iOS device, you can also set the user to be automatically logged off the device. Setting any of these options stops the chosen username from appearing against the iOS device in the Console at the chosen time.

The app continues to run, and you can still monitor the device from your Impero Console, but any activity is only logged against the device and not against any user.

Log device off at

Choose a date and time at which the user stops being displayed against the iOS device.

Log device off after

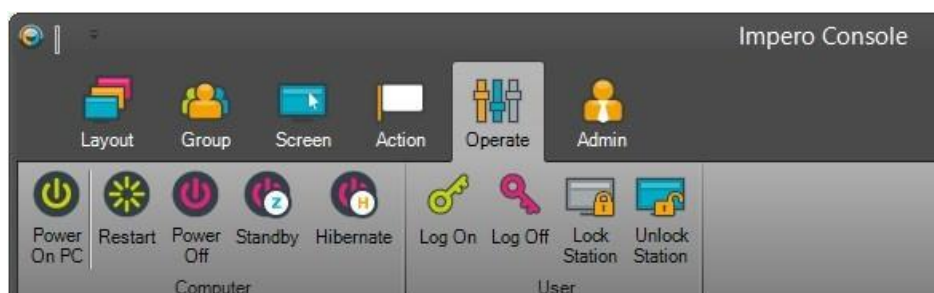
Choose a time length in 'Days', 'Hours' and 'Minutes', after which the user stops being displayed against the iOS device.

Alternatively, you can also at any time manually stop a user from appearing against an iOS device by selecting the device(s) in the Console, and then clicking on the 'Log Off iOS Device' button in the 'Action' menu.

For further details on using iOS devices with Impero, please see the Impero Education Pro 'iOS Pro Guide'.

2.5 Operate Toolbar

The Operate toolbar (Image 52) allows you to turn computers on or off, log on computers with specified credentials, lock workstations, and unlock or log off a workstation that a user left logged on and locked.



Power On PC

- In the Console, select offline computers that you wish to power on.
- Select the 'Operate' toolbar.
- Click on the 'Power On PC' button.
- A wake up command is then sent to all the computers you selected.
- If the computers do not wake up as expected, please ask your network administrator to configure Wake-on-LAN for those computers.

Restart, Power Off, Standby, Hibernate

- In the Console, select the computers that you wish to restart, power off, or put into standby/hibernate mode. Select the 'Operate' toolbar.
- Click on the button for the action that you wish to perform.
- Any logged on user are notified before the task is executed (Image 52.1). Log On
- In the Console, select the computers that you wish to log on to.
- From the 'Operate' toolbar, click on 'Log On'.
- A window is displayed, allowing you to enter the username, password and domain name that you wish to log in with (Image 52.1). – Enter the relevant credentials and click on 'OK'.
- Selected computers then log in using the supplied credentials.



Image 52.1 – Remote Login

Log Off

- Select the computers that you wish to log off.
- Click the 'Log Off' button from the 'Operate' toolbar.
- The selected computers are then logged off. - Any unsaved items are lost.

Lock Station

- Select the computers that you wish to lock.
- From the 'Operate' toolbar, select 'Lock Station'.
- The standard Windows lock is applied to the selected computers.

- The user can unlock the computer again by clicking on 'Ctrl + Alt + Del' and entering their user credentials.

Unlock Station

- Select the computers that you wish to unlock.
- Click on the 'Operate' toolbar and select 'Unlock Station'.
- The selected computers are then unlocked, bypassing any password protection that may be in place.
- You can then connect to that session and save any work before logging off or shutting down the computer.

Note: Windows XP workstations cannot be unlocked in this way due to Microsoft technologies.

2.6 Admin Toolbar

The Admin Toolbar (Image 53) enables you to administer a large number of properties within the Impero Console.



Image 53 – Admin Toolbar

2.6.1 AD/LDAP Control

Using the AD/LDAP Control tools, Impero can be used to enable/disable user accounts and change their passwords. This is especially useful for console administrators when end-users have forgotten their passwords, negating the need for a network administrator to be troubled for password changes.

Note: The AD/LDAP controls are dependent on the Active Directory settings being in place, and having sufficient privileges, in the Impero Server. Any user that is a member of a group containing the word 'Staff' or 'Admin' is exempt from these controls taking effect on their user.

- Firstly, [select](#) the users that you wish to perform the action on.
- Click on the 'Admin' toolbar and select the AD/LDAP option you wish to perform:

Enable/Disable Account

- Click on this option to enable/disable user accounts.
- You then see a prompt telling you that the 'The enable/disable account command was successfully sent to Impero Server'.
- Providing your AD settings are correctly applied, the selected user account is then enabled/disabled.

Change User Password

- Click this option to change user account passwords.
- You are presented with a new window (Image 54) which displays the usernames of any selected users. Alternatively, you can type username into the 'Username(s):' text area.



The dialog box is titled "Impero - Change User Password". It contains a message: "To change a users password, please enter their username in the box provided and enter a new password. To change more than one users password, separate the usernames with semi-colon (:.)". Below this is a text field labeled "Username(s):" containing the text "peter; linda; louise". There are two password fields: "New Password:" and "Confirm Password:", both containing masked characters (dots). Below the password fields is a checkbox labeled "User must change password at next logon" with the subtext "(this will fail if 'Password never expires' is set for the user)". At the bottom are "OK" and "Cancel" buttons.

Image 54 – Change User Password

- Enter the new password in the 'New Password' and 'Confirm Password' fields.
- You have the option to force the end-user to change their password to one of their own choosing when they log in next.
- Click on the 'OK' button.
- You receive a prompt that tells you the status of the password change operation (Image 54.1):



The dialog box is titled "Impero - Change User Password". It contains the same message as Image 54. Below the message is a list of status messages for each user: "peter: The password was changed successfully", "linda: The password was changed successfully", and "louise: Username doesn't exist".

Image 54.1 - Password Change Status

2.6.2 Task Manager

The Task Manager feature allows you to view the processor usage of selected computers, end tasks and start/stop Windows Services.

- Select the computer(s) in the Computer List by checking the tick box to the left of the username.
- Click on the 'Task Manager' menu item in the 'Admin' toolbar, which opens the 'Impero - Task Manager' window (Image 55).

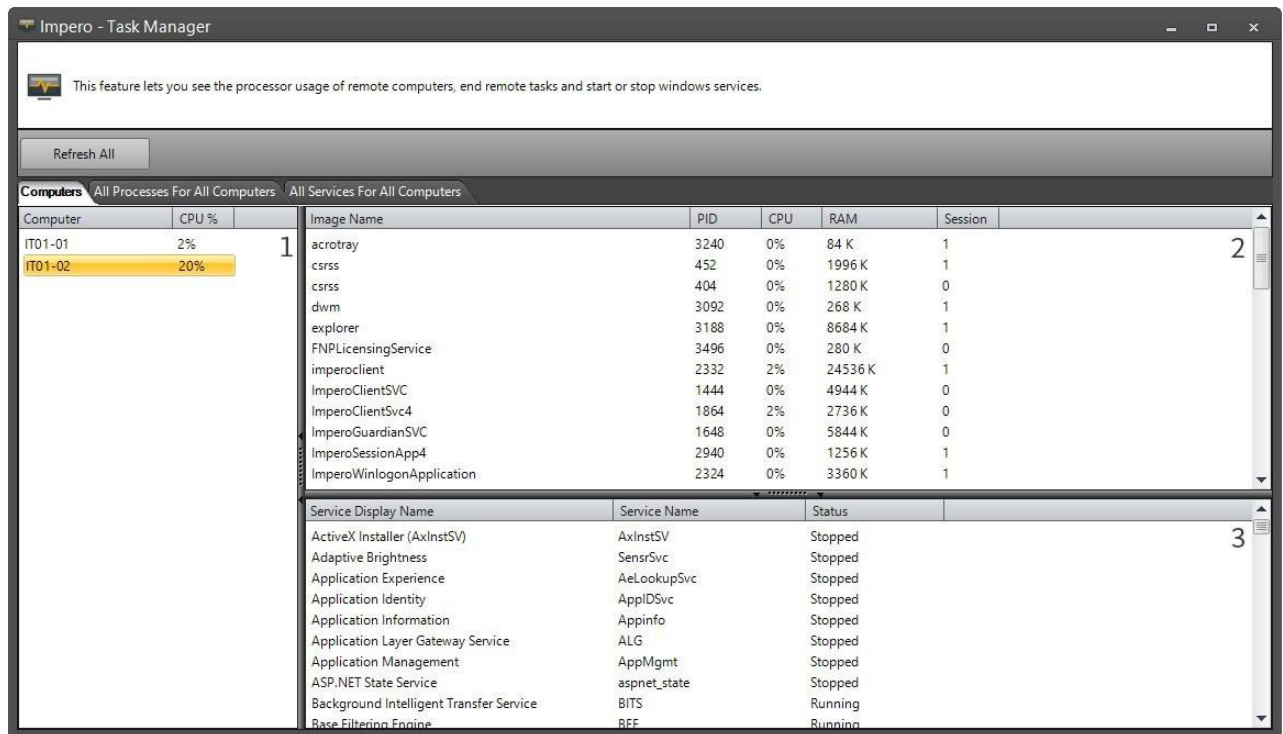


Image 55 - Task Manager

[1] - Computers

The left-hand panel shows a list of the selected computers. Clicking on one of these computers display its processes and services in the two panels on the right-hand side.

[2] - Processes

The upper of the two panels on the right-hand side shows the processes currently running on that computer, as well as various statistics. These statistics include the current percentage of CPU consumed by that process and the RAM being used by that process. You can end any of these processes by right-clicking with the mouse on the process and selecting 'End Process'. Similarly, by right-clicking on a process, there is also an option to view more detailed properties of what is running.

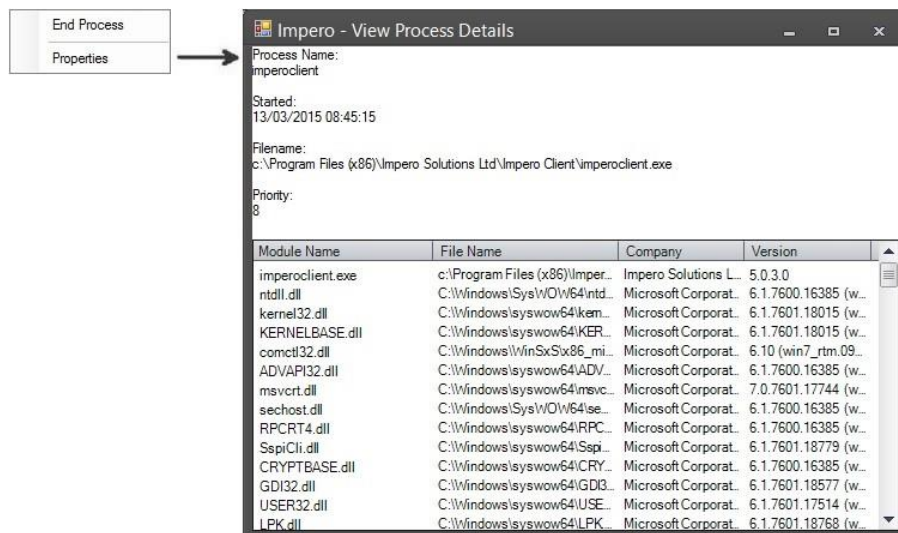


Image 55.1 - Task Properties

[3] - Services

The lower panel displays all the Windows Services on that machine, and whether they are currently stopped or started. You have the option of starting/stopping these services by right-clicking with your mouse on the services.

- The 'Refresh All' button at the top of the window refreshes all panels to show the latest running processes and services.
- There are two further tabs available in this window - 'All Processes For All Computers' and 'All Services For All Computers'.
- These display a list of the processes/services that are running on ALL the selected computers (Image 55.1).

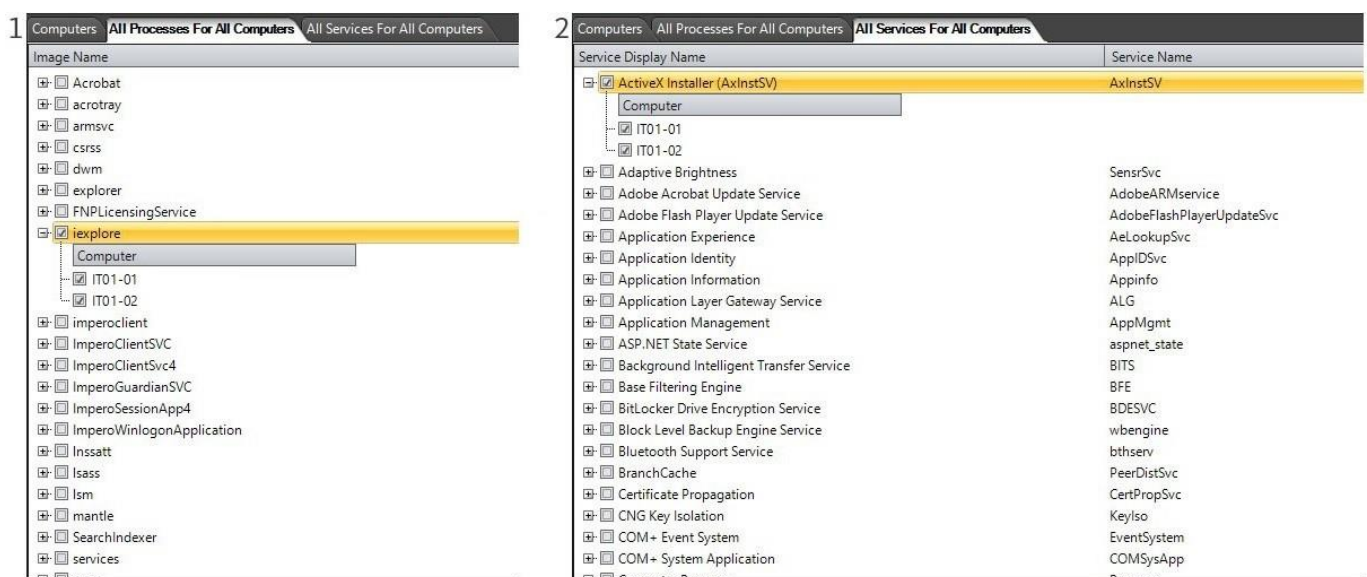


Image 55.1 - All Processes/Services

This enables you to, for example, end processes (Image 55.1 - [1]) or stop/start services (Image 55.1 - [2]) on multiple computers in one click, rather than having to click through multiple computers to perform the same action.

2.6.3 Command Prompt

The 'Command Prompt' feature is available via the 'Admin' toolbar. This allows you to send commands to [selected](#) remote computers and view feedback as it is returned to the Impero Console.

- In your Impero Console select the computers you wish to run commands on.
- From the 'Admin' toolbar, click on 'Command Prompt'.
- Enter the desired commands into the text field at the bottom of the screen.
- Click on the 'send' button to send the command to the remote computers.
- Results are then returned to the console in the same window (Image 56).
- This runs silently as a background process on the remote computer, so any logged on user is unaware of any activity.

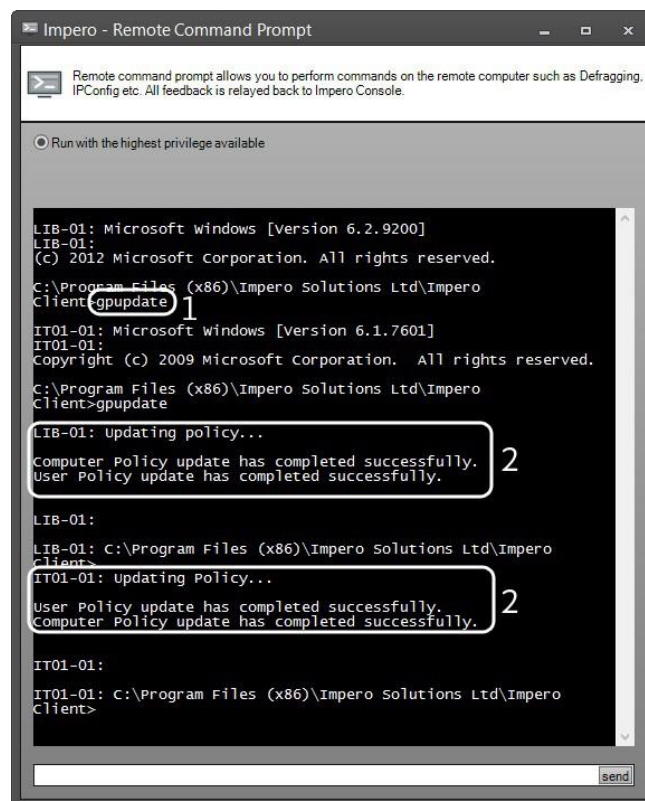


Image 56 - Command Prompt

- [1] - The 'gpupdate' command is sent to the selected remote computers.
- [2] - 'gpupdate' results are returned from the selected remote computers.

2.6.4 File Search

The 'File Search' tool is accessed through the 'Admin' Toolbar and allows you to search for files on the remote computer(s).

- Select the computer(s) that you wish to search on by checking the tick box to the left of each required computer in the Computer List.

- Click on the 'File Search' button in the 'Admin' toolbar (Image 57).

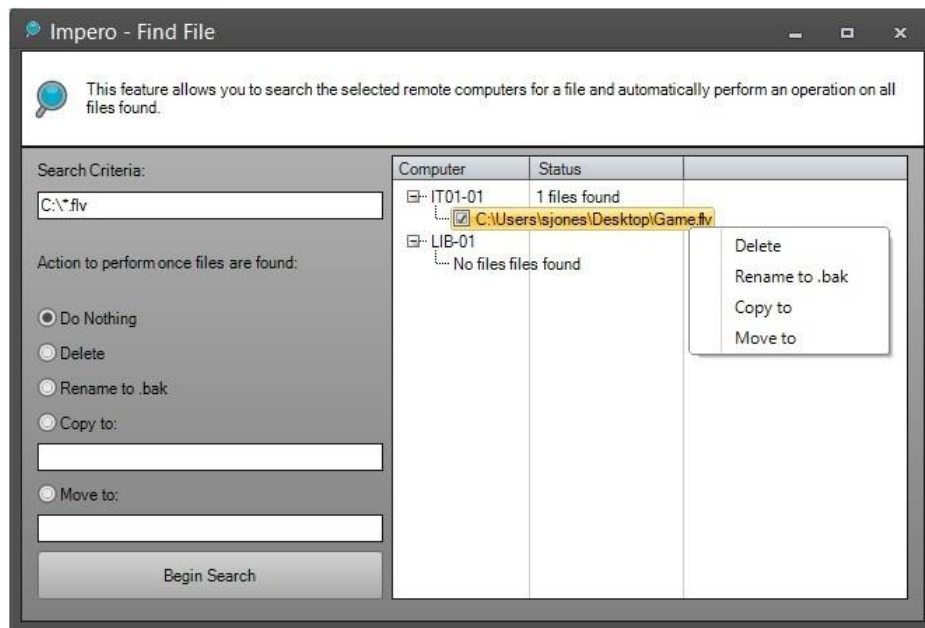


Image 57 - File Search

- In the 'Find File' window, you can then enter the criteria for the search that you wish to carry out in the 'Search Criteria' field.

Note: You can add wildcards to the search if you do not know the exact filename by adding an asterisk (*).

- Under the 'Search Criteria' field, there are a number of actions you can perform on the resultant file(s):

Do Nothing

This simply returns the result(s) in the right-hand panel and leave the file alone.

Delete

This returns the result(s) and delete any files that meet the search criteria.

Rename to .bak

This returns the result(s) and renames any resultant files to have a .bak file extension.

Copy to



Enter the path to which you wish to copy any resulting file(s). The result(s) is displayed and the file copied to that location.

Move to

Enter the path to which you wish to move any resulting file(s). The result(s) is displayed and the file moved to that location.

- Once you created your search criteria, click on the 'Begin Search' button.
- The results then begin to be displayed in the panel on the right-hand side.

Note: The search may take a short while if your criteria needs to search through a large number of files.

- You see a list of the computers you searched upon with a  icon to the left of the computer name.
- Click on the  icon to view a list of any files that were found on that computer.
- You can then tick any of the found files and right-click on them in order to perform any action on the file after the search has completed.

2.6.5 Run MiMiC Script

The 'Run MiMiC Script' tool, which can be accessed via the 'Admin' toolbar, allows you to record a series of keyboard events which can then be sent to be replayed on [selected](#) remote computers. This enables you to script complex keyboard events which can then be simultaneously carried out on all selected computers, saving time and effort by completing one task on multiple machines at the same time.

- Select the computers that you wish to run your script on.
- From the 'Admin' toolbar, select 'Run Mimic Script'.
- In the new window (Image 58) you can type keyboard events into the text area, as well as select from a list of shortcuts that you can add to the keyboard event script.

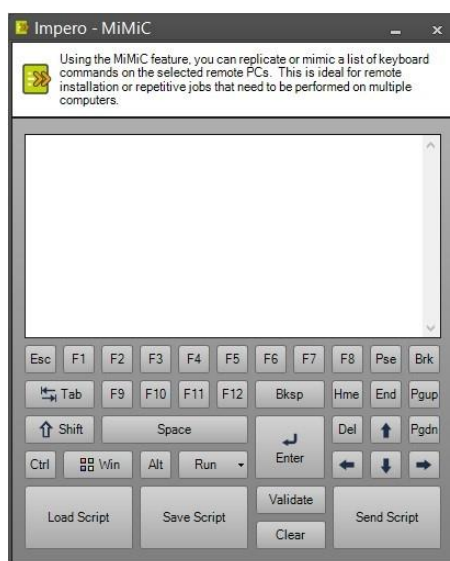
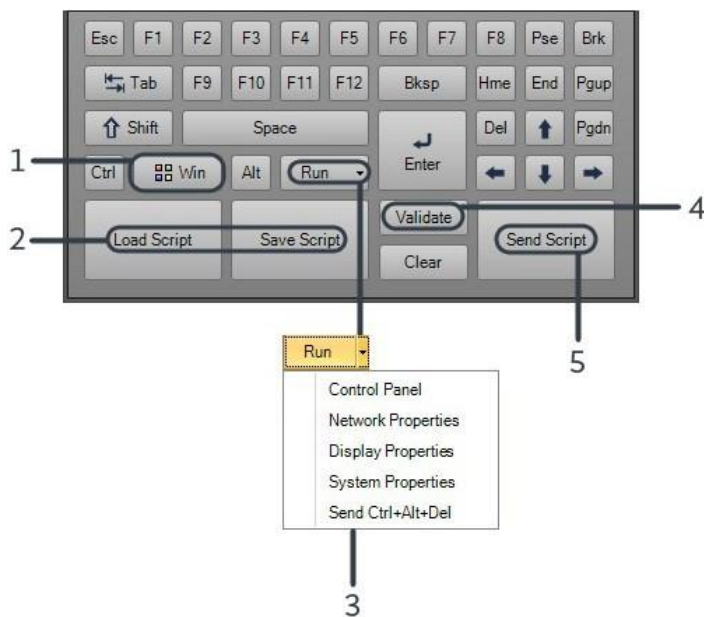


Image 58 - MiMiC

- Clicking on any of these shortcuts add the relevant command to the text area as part of your script to be sent to the remote computers.
- There are further tools available to you here, such as the ability to save and load MiMiC scripts that you may wish you use again in future (Image 58.1).



1 - The 'Win' key opens the Windows 'Start' menu on the remote computer(s).

2 - You can save a script that you are likely to use repeatedly, and then re-load it when you are required to use it again. 3 - The 'Run' key opens the Windows 'Start > Run' command. There is also a list of pre-configured options that you can select here.

4 - The 'Validate' key verifies if your script is valid to send to the remote computer(s).

5 - Send the script to run on the remote computer.

- In order to create a script, type/key in each command that you wish to send to the remote computer on a new line in the text area.

- Once you are happy with your MiMiC script, click on the 'Validate' key to ensure that your script is valid. - If your script is valid, click on the 'Send Script' button (Image 58.1):

Note: Extra spaces within your script causes it to fail. If you get a message saying 'Script is Not Valid' - check through your MiMiC script

Image 58.1 - MiMiC Keys

for extra spaces.



Image 58.2 - Run MiMiC Script

The example in Image 58.2 is a simple script with four commands:

!RUN(iexplore.exe) : Click on the 'Run' key which enters '!RUN(' into the text area for you. This does a 'Start > Run' command on the remote computer. In the brackets, type in the command that you wish to run. In this example 'iexplore.exe' which launches Internet Explorer.

!F6 : Click on 'F6' on the MiMiC shortcut key list. On the remote computer, this puts the cursor into the Internet Explorer address bar. www.imperosoftware.co.uk : This specifies 'www.imperosoftware.co.uk' into the Internet Address bar.

!ENTER : Click on 'Enter' key on the MiMiC shortcut key list. On the remote computer, this presses the 'Enter' key, therefore loading the Google web page on Internet Explorer on the remote computer.

This is just one example of how the keystrokes and MiMiC scripts can be used. You can also change screen resolutions or simply write text into applications that a user has open.

2.6.5.1 MiMiC Commands

All script commands are preceded with an exclamation mark (!). If you do not use an exclamation mark before text, Impero assumes that you simply wish to write the word, for example:

!start - Impero simulates a key press on the Windows key which shows the start menu.

start - Impero assumes that you wish to write the word 'start' and not perform a command.

Please see below for a list of available commands that can be used within a MiMiC script.

!cad - Key press Ctrl + Alt + Del

!start - Key press on the Windows key

!ctrl - Key press on the Ctrl key

!alt - Key press on the Alt key

!shift - Key press on the Shift key

!enter - Key press on the Enter key

!space - Key press on the Space Bar

!arrowup - Key press on the Up Arrow key

!arrowdown - Key press on the Down Arrow key

!arrowleft - Key press on the Left Arrow key

!arrowright - Key press on the Right Arrow key

!delete - Key press on the Delete key

!backspace - Key press on the Backspace key

!F1 - !F12 - Key press on the F1 to F12 keys

!esc - Key press on the Escape key

!tab - Key press on the Tab key

!break - Key Press on Break key

!end - Key press on End key
!home - Key press on Home key
!shutdown - Shutdown the computer
!restart - Restart the computer
!logoff - Log off the computer
!pause(time) - Pause/Delay for (time)
in seconds !run(app) - Run the
application in the brackets

You may also use compound commands such as:

!start+r - The Windows key and R key are
pressed together !ctrl+!shift+!esc - This opens
the task manager

Finally, if you wish to push a key X number of times you need to add the following to the
end of the command:

!enter(X) - the Enter Key is pressed X number of times

The same rule applies for all commands except the shutdown, restart, logoff and run
commands.

2.6.6 Event Viewer

The Event Viewer tool allows you to view the latest 500 event entries in various categories on the [selected](#) computers.

- Select the computers you wish to view in the Computer List.
- Press the 'Event Viewer' button under the 'Admin' toolbar. - This opens a new window (Image 58).

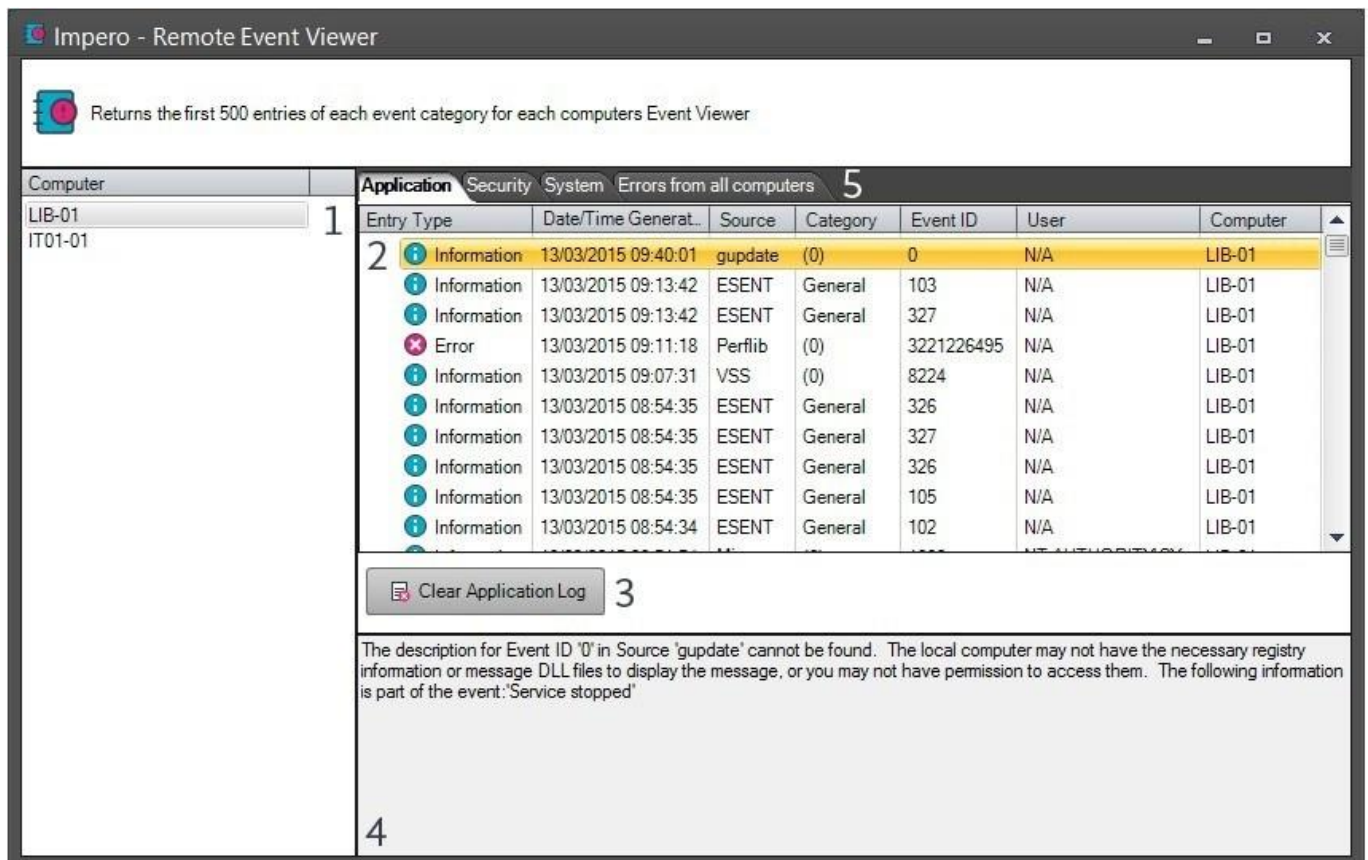


Image 59 - Remote Event Viewer

[1] - Computer List

This panel displays a list of all the computers that are selected in the Console.

[2] - Events

If you click to select one of the computers in the computer list, the large panel on the right-hand side then displays the event log for that computer. By default, the Event Viewer opens to the 'Application' tab, with the entries displayed in 'Date/Time Generated' order, with the latest first. There are further information columns for 'Entry Type', 'Source', 'Category', 'Event ID', 'User' and 'Computer'. The list can be ordered by any of these columns by clicking on the column heading.

[3] - Clear Application Log

Clear the log view that is currently open on screen.

[4] - Information

If you select any of the event entries in the log, the bottom panel on the right-hand side displays further information relating to that event.

[5] -Tabs

There are three further tabs of event logs that you can view: 'Security', 'System' and 'Errors from all computers'. The security and system tabs behave in the same way as the application tab, displaying events of that specific category type.

- The 'Errors from all computers' tab collates any errors from the event viewer generated from any of the computers that were selected in the Console (Image 59.1).
- This gives you a quick way of finding any errors that may be occurring on all of the selected computers.
- Selecting the entry in the Event Viewer displays further information about the error in the bottom panel (Image 59.1).





Computer	Application	Security	System	Errors from all computers		
LIB-01 IT01-01	Date/Time Generated	Computer	Source	Category	Event ID	User
	 13/03/2015 09:11:18	LIB-01	Perflib	(0)	3221226495	N/A
	 12/03/2015 08:56:36	LIB-01	Perflib	(0)	3221226495	N/A
	 05/03/2015 15:50:58	LIB-01	Perflib	(0)	3221226495	N/A
	 10/03/2015 16:41:54	IT01-01	WinMgmt	(0)	3221225482	N/A
The description for Event ID '-1073740801' in Source 'Perflib' cannot be found. The local computer may not have the necessary registry information or message DLL files to display the message, or you may not have permission to access them. The following information is part of the event: 'rdyboost', '4'						

Image 59.1 - Errors from all Computers

2.6.7 Print Quota

The Print Management feature allows you to assign a set amount of print credits to users or groups, enabling you to manage paper costs and toner, cutting waste and therefore saving money across your organisation.

- In order to make use of this feature you must first ensure that is enabled, as it is by default set to disabled.
- To check this, right-click on your 'Entire Network' group and select 'Properties'.
- Click on the 'Group Settings' tab, followed by the 'Workstation Settings' button.

- Ensure that the 'Disable pCredit (Printer Credit System)' is un-ticked in order enable the pCredit system (Image 60).

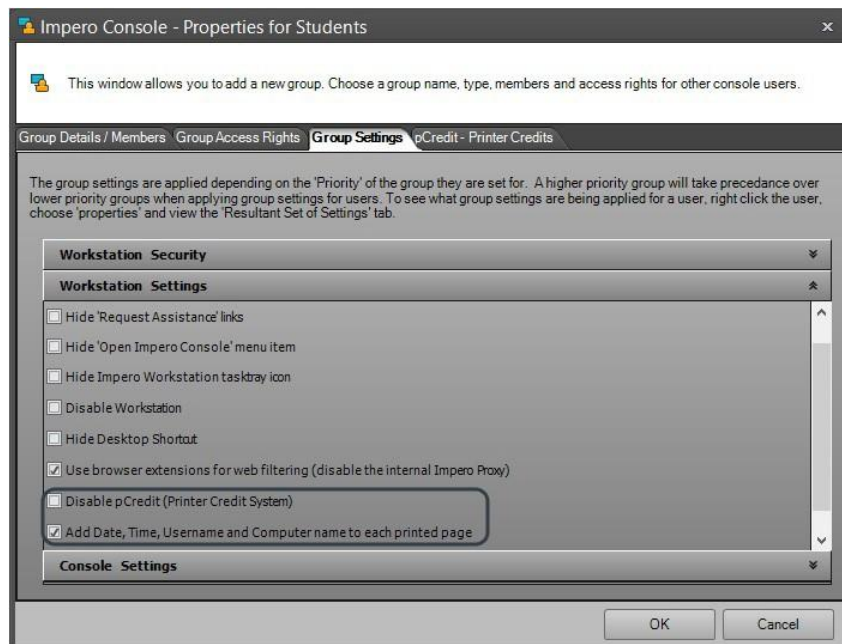


Image 60 - Enable pCredit System

Note: By default, the 'Entire Network' group has a priority setting of 'Medium'. If you have any 'High' priority groups, you may need to verify that the pCredit system is enabled on these groups to ensure that all users are being governed by this feature. You can check whether or not this setting is applied to a particular user via the [Resultant Set of Settings](#) tab.

- An additional tick box here allows you to add details to every page that is printed on your network.- Select 'Add Date, Time, Username and Computer name to each printed page'.
- These details are then displayed at the bottom of every printed page.
- Once the pCredit system is enabled, you can begin the configuration.
- Select the 'Admin' Toolbar and click on the 'Print Quota' button (Image 60.1).
- From here you are able to set up printer costs, and manage user credits.
- Once the pCredit system is enabled and configured, you can use the 'Allocate print credits' option here to assign a specified number of credits to any users currently selected in the Impero Console.

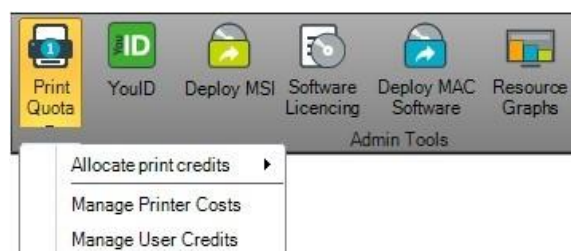


Image 60.1 - Print Quota

2.6.7.1 Manage Printer Costs

The 'Manage Printer Costs' option lets you set up the cost per printed page on all the printers within your network.

- From the 'Admin' toolbar, click on 'Print Quota'.
- Select 'Manage Printer Costs' from the drop-down menu.
- This opens the 'pCredit Printer Setup' window (Image 61).

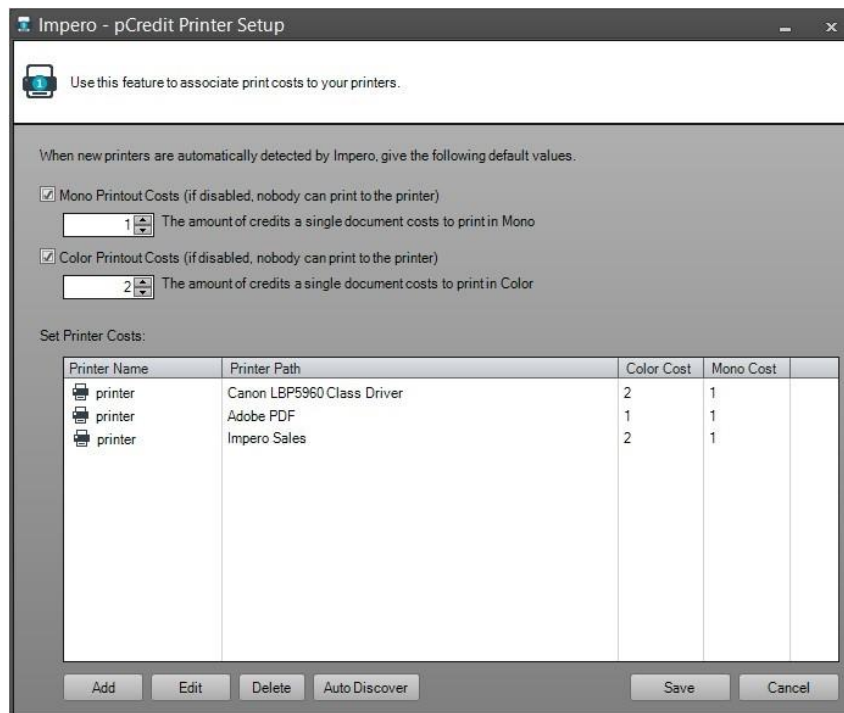


Image 61 - Manage Printer Costs

- There are a number of options allowing you to configure printer costs.

Mono Printout Costs

Set up the default cost per printed black and white page. The number you enter in here is the mono printout cost for any new printer on the network.

Color Printout Costs

Set up the default cost per printed colour page. The number you specify in here is the colour printout cost for any new printer on the network.

Set Printer Costs

This panel displays all the printers that are currently known to Impero on your network. The 'Color Cost' and 'Mono Cost' columns display to you the cost that is currently applied to colour/mono pages for each printer. You can double-click on any of these rows to edit the costs for that specific printer. This can also be achieved by clicking to select a row and clicking on the 'Edit' button at the bottom of the window.

There are two ways in which you can add a printer to the pCredit system:

- In order to manually add a new printer, click on the 'Add' button at the bottom of the window.
- In the new window, specify the details of the new printer (Image 61.1).
- You can also edit the cost amount per page printed to this printer.

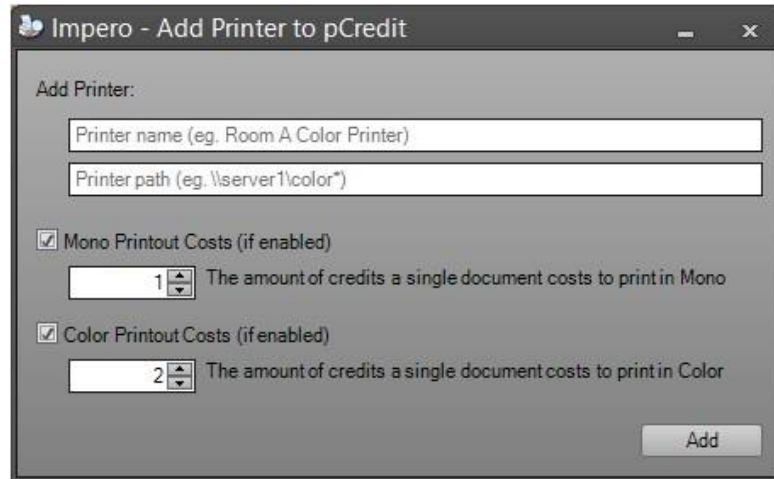


Image 61.1 - Add Printer

- In order to add import printers from your Active Directory, click on the 'Auto Discover' button.
- This requires you to have your Active Directory settings applied correctly in the Impero Server.
- Providing those settings are in place, all printers from your Active Directory is then displayed in the 'pCredit Printer Setup' window.
- If you wish to remove any printers from the system, click on the printer to select it.
- Click on the 'Delete' button.
- If you made any configuration changes in this window, click on the 'Save' button.

2.6.7.2 Manage User Credits

The 'Manage User Credits' option allows you to configure the amount of print credits that apply to users on your network. This can be set up to fully automate the allocation and recharging of user credits.

- From the 'Admin' toolbar, click on 'Print Quota'.
- Select 'Manage User Credits' from the drop-down menu.

- This opens the 'pCredit User Credits' window (Image 62).

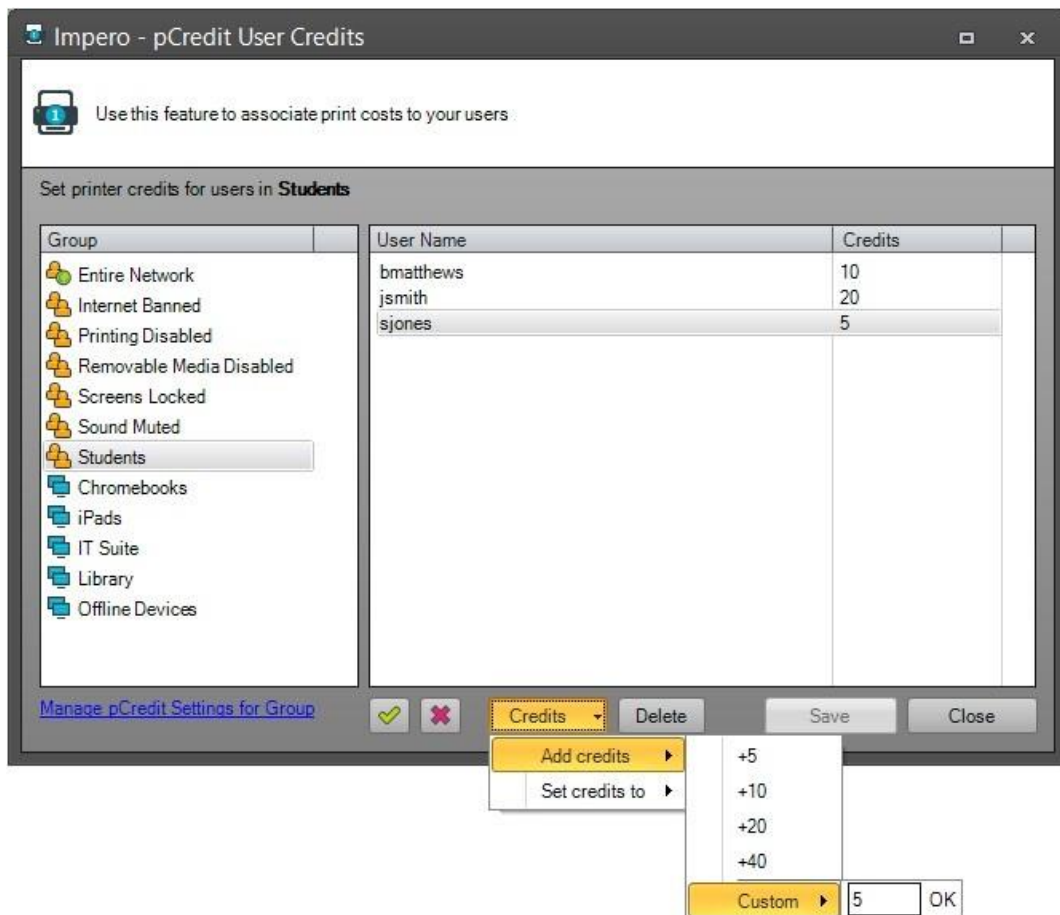


Image 62 - Manage User Credits

- There are a number of options available from this window:

Groups

In the left-hand panel in this window, you can select from the list of your Impero groups. The right-hand panel of the window updates to display to you all the users that currently belong to the selected group.

Users

The right-hand panel in this window updates to display the users belonging to the currently selected group on the left-hand side. The 'Credits' column here displays to you how many print credits this user currently has allocated to them. You can click on a user here to select them or hold the 'CTRL' key on your keyboard while clicking in order to selected multiple users. Alternatively, click on the green tick icon to select all users in the current group, or the red 'X' icon to deselect all users.

Credits

With one or more users selected in the 'Users' panel, you can click on the 'Credits' button in order to apply a certain number of credits to them.

Add credits - Add a set number of credits to the selected user(s). Use the built-in values, or hover over 'Custom' and type in a specific number of credits.

Set credits to - Set the selected user(s) to have a specific amount of credits. Use the built-in values, or hover over 'Custom' and type in a specific amount of credits.

Save

If you have made any changes in this window, ensure you click on the 'Save' button when you have finished.

Manage pCredit Settings for Group

Click on this link in order to open a new window that allows you to automate the pCredit system for the currently selected group (Image 62). This option is only available if you have a user based group currently selected.

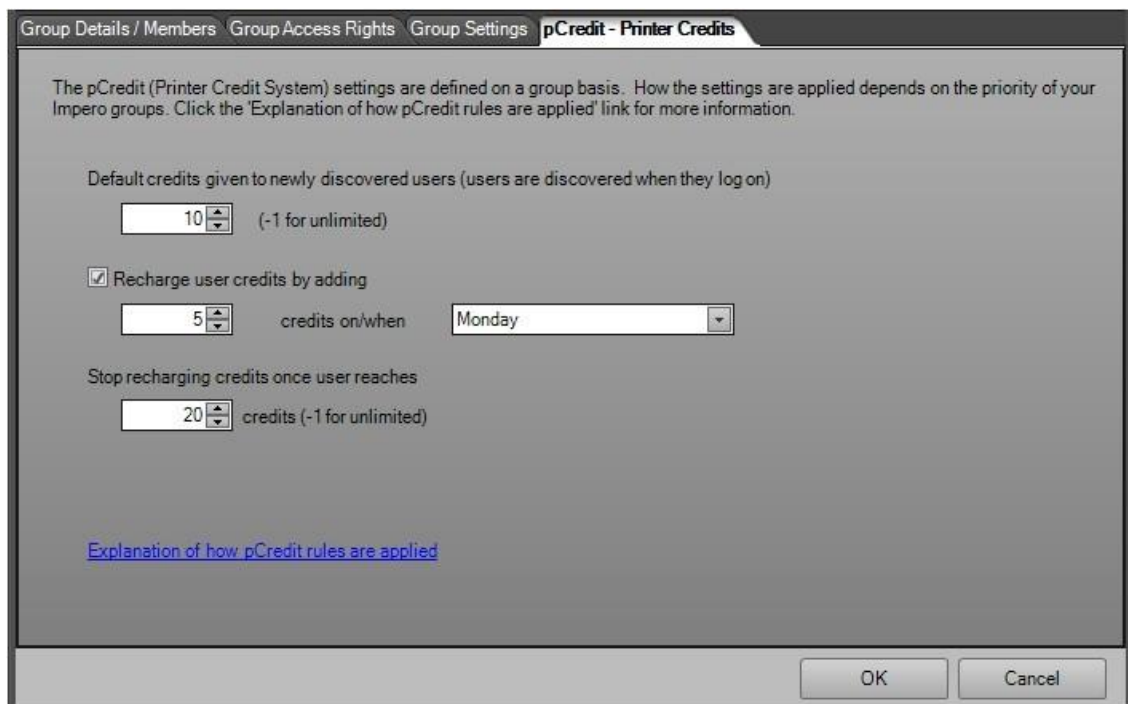


Image 62 - Manage pCredit Settings for Group

Default credits given to newly discovered users

Enter the default amount of printer credits that is applied to newly discovered users. New users are 'discovered' when they log on for the first time since being placed into the group you are currently editing.

Recharge user credits by adding

Tick this option if you wish to set up an automatic recharge of user credits. Once ticked, the following two fields become active, allowing you to specify how many additional credits are applied to users in this group, and when you wish to apply these credits. The addition of credits take place shortly after 12:00am on the day that you have selected here.

Stop recharging credits once user reaches

Set up a maximum credit amount here. Once a user has the number of credits set in this field, they are unable to accumulate any further credits, regardless of the 'Recharge user credits by adding' setting.

You can click on the 'Explanation of how pCredit rules are applied' link to open your default web browser to a window documenting the pCredit rules in further detail. Alternatively, please visit the following website to view these rules:

<http://www.imperosoftware.com/docs/pCreditRules.html>

Note: The important factor to note when utilising the pCredit System is that it is wholly 'USER' based. Therefore, if you set the credits for users in a computer group, you are setting the credits for those users globally, irrespective of the COMPUTER GROUP they are in. Thus, in this case the computer groups are used simply as a way of navigating to your users.

2.6.8 Deploy MSI

The 'Deploy MSI' tool, located in the 'Admin' toolbar, allows you to deploy installation packages to remote computers using Impero. Unlike other Impero Console tools, 'Deploy MSI' does not require Impero to be installed on the remote machines, therefore this tool can be used to deploy the Impero Client to any remote machines that require it.

Note: You can use this tool to deploy third party MSIs to remote machines as long as the MSI file is local to the machine, since the MSI deployment tool does not support the use of shared directories.

Selecting the 'Deploy MSI' menu item opens the 'Impero - Remote Deploy MSI' wizard (Image 64) and this gives you three options to choose from to assist with deploying the MSI file to your network - for example, deploying the Impero Client to remote machines. First you must select the desired computers to install the package to. You can do this in a number of different ways: Found Computers, Manual Add and Add Domain. Once you have selected the computers see 'Step 2 - Installing the Clients.'

Step 1: Selecting Computers

Found Computer

You are presented with a list of computers that have been found by your computer. You are required to tick the computers that you would like to install, for example, the Impero Client on.

Note: This only displays the computers that have been discovered by your Computers Browser service, and that have been switched on for at least 12 minutes and are also on the same VLAN.

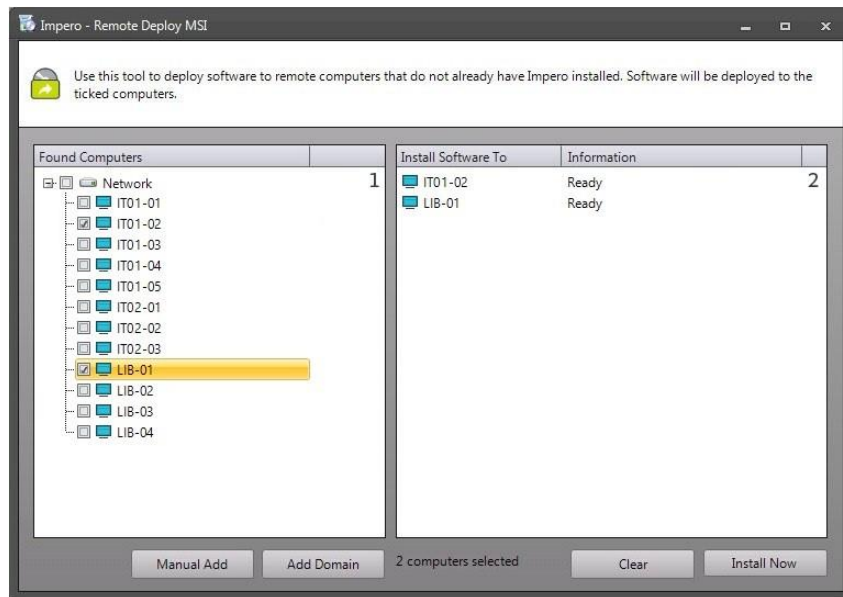


Image 64 - Remote Install Client, Found Computers

- 1 - List of computers that are discovered on your network. Select the checkboxes on the left to install Impero Client to those computers.
- 2 - The computers that have been checked in the left-hand panel. The Impero Client is installed to these computers ten at a time in order to keep bandwidth usage down.

Manual Add:

Enter a computer name or IP Address:

This option allows you to either enter the computer name or the IP Address of the computer you would like to install the Impero client on (Image 64.1).

Enter an IP Address Range:

This allows you to enter a starting IP Address and an ending IP address. The 'Impero - Remote Deployment' wizard then tries to install the Impero Client to every IP address in that range.

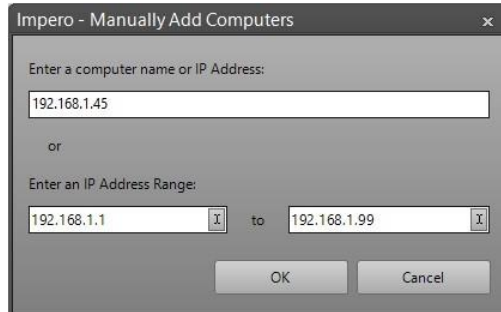


Image 64.1 - Manual Add

Add Domain:

This option loads your Active Directory structure in the 'Impero - Remote Deploy MSI' wizard (Image 64.2) in the Found Computers window beneath the network.

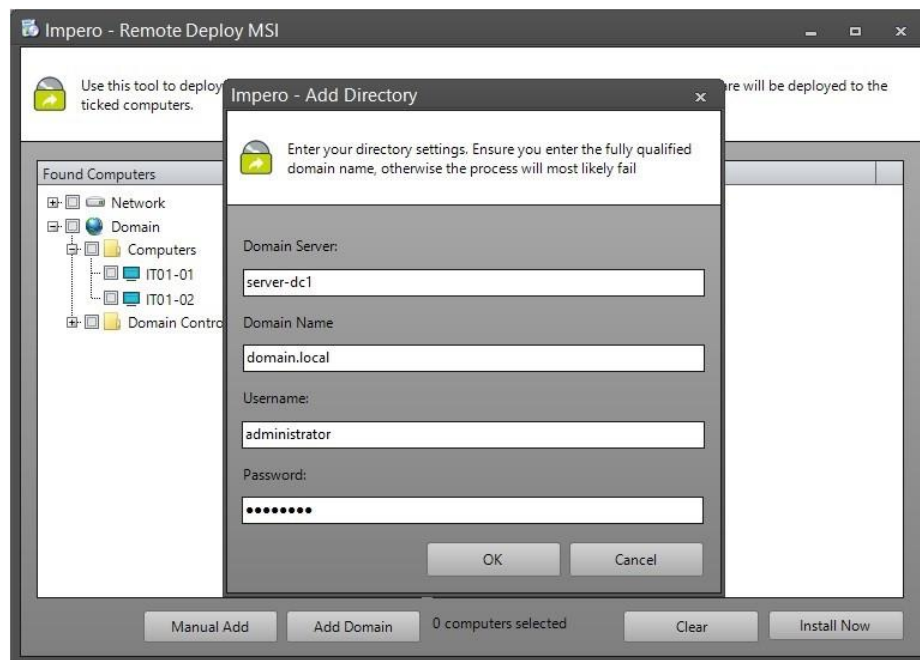


Image 64.2 - Add Domain

Note: Collapse the network heading and you see your Active Directory.

Step 2: Installing the Clients

1. Once you have selected the clients, click on the 'Install Now' button.

2. On the dialogue box 'Impero - Choose MSI' (Image 64.3), browse and locate the ImperoClientSetupxxxx.msi. It is necessary that this file is local to this machine as the MSI deployment tool does not support the use of shared directories.

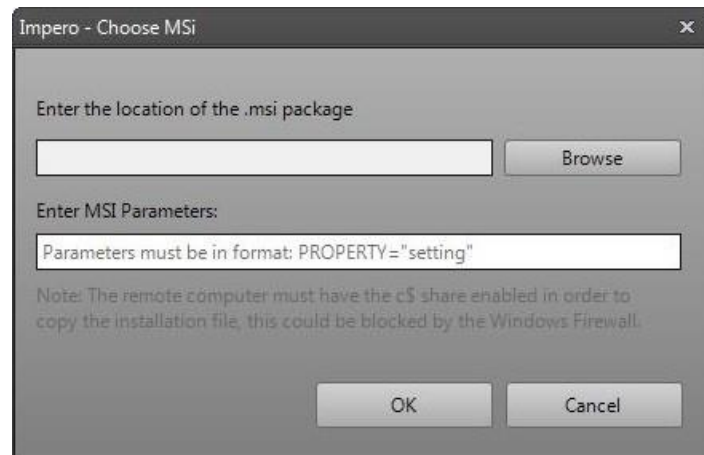


Image 64.3 - Choose MSI

- Note:** You can also browse to install third party MSIs, as long as the MSI file is local to the machine and does not reference external CAB files.
3. Leave the 'Enter Parameters' dialogue box blank as the Impero Client MSI already has the parameter silently built-in.
 4. Click on 'OK'.
 5. Click on 'OK'.
 6. In the 'Impero - Enter Password' dialogue box enter your username and password. You may choose to use a local admin user account or a domain admin user account.

Local Account:

Username:

Administrator

Password: Your
password

Domain Account:

Username:

Domain\Administrator

Password: Your
password

7. Click on 'OK'.
8. 'Impero - Enter Server IP'. You need to enter the IP address of your Impero server, if you do not know this address leave this blank as the clients do a UDP broadcast to find the server. If you use multiple VLANs then you are required to specify the IP address of your Impero Server or see ['Creating a DNS record'](#).

Note: This option only appears for the Impero Console MSI.

9. Click on 'OK'.

10. Impero now installs the clients on the computers you have selected. Impero only deploys to 10 computers at a time; this reduces the amount of traffic on your network and as one finishes another starts.
11. You either see 'Installation Successful' or an error message. If you receive an error message, please refer to the 'Troubleshooting Windows Clients' section of the [Server Install Guide](#).

2.6.9 Software Licencing

The Impero Software Licencing feature allows you to manage the number of instances of software running across the entire network. You can enforce licence thresholds so that subsequent attempts to run the software can be blocked. This is especially useful for satisfying auditing requirements and showing that your organisation is aware of how software is being utilised throughout the network.

- Click on the 'Admin' toolbar and select 'Software Licencing'.
- The 'Software Licencing Control' window opens on your screen (Image 65).

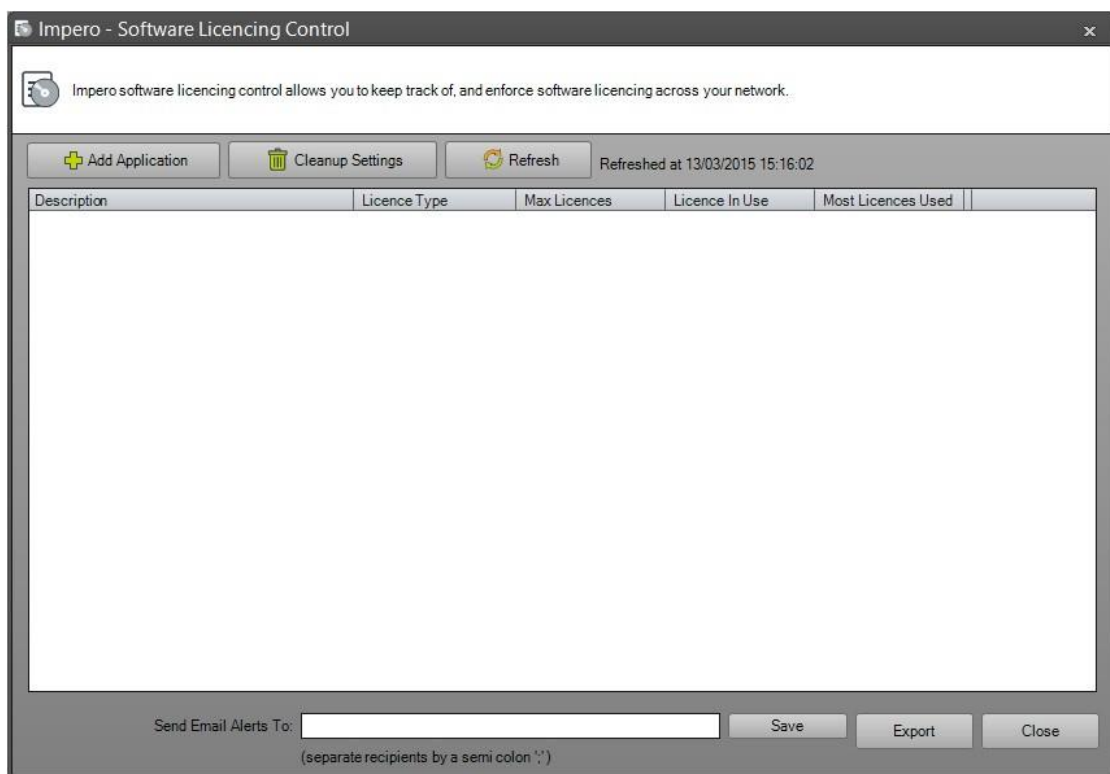


Image 65 - Software Licencing

- To set up a software licensing monitor, click on the 'Add Application' button in the top left-hand corner of the window.

- This opens a new window allowing you to enter the details of the new Application (Image 65.1).

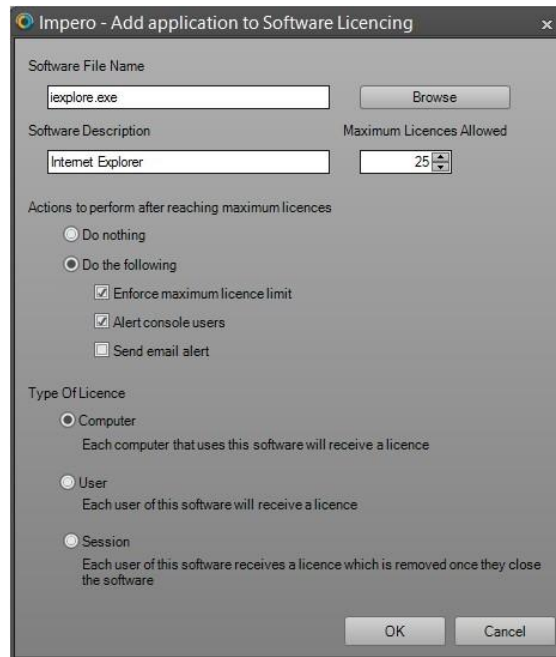


Image 65.1 - Add Application

- There are a number of options presented within this window that affect how the licensing of the software product are monitored.

Software File Name

This is the name of the executable file of the software, for example 'winword.exe' (Microsoft Word), 'iexplore.exe' (Internet Explorer), 'photoshop.exe' (Adobe Photoshop). You can also manually locate the executable file by clicking on the 'Browse' button and selecting the executable.

Software Description

This is a description field to explain to users what the application is. This is how the application is displayed in the Licence Control list.

Maximum Licences Allowed

Enter the number of software licences in this field; this is the maximum amount of licences for this application.

Actions to perform after reaching maximum licences

The actions that you wish Impero to carry out when the maximum number entered above has been exceeded.

Do nothing

When the licence threshold is exceeded, Impero takes no action. This is a good way of monitoring software popularity or testing for whether more software licences are needed.

Do the following -

Enforce maximum licence limit - When the maximum number of licences is reached, a user trying to run the application is presented with the following window (Image 65.2).



Image 65.2 - License Exceeded User Warning

Alert console users - When the maximum number of licences is reached, console users are alerted to workstations trying to run the application with the following dialogue (Image 65.3).



Image 65.3 - License Exceeded Console Alert

Send email alert - Every time the licence threshold is exceeded, an email is sent to the email addresses defined on the software licensing interface. These addresses are required to be added to the 'Send Email Alerts To:' field (Image 65).

Type of Licence

There are different ways in which software usage can be monitored across the network.

Computer

A licence is bound to the computer it is run on, regardless of the user that is using it. This is helpful in situations where you want to restrict the use of an application to say one particular group. The licence always attaches itself to the computer hardware that the software is run on.

Therefore, in thin client cases like Citrix or VMWare, the licence is attached to the deployed thin client terminal i.e., the slave workstation that the virtual image is deployed to. In the case of NComputing or SoftXpand the licence attaches itself to the Server terminal, hence one NComputing machine with six terminals connected only use one licence.

User

A licence is bound to the user's login ID so they can run the application on any PC on the network. This is particularly useful if you want to allow software to be used only by a particular user group.

Session

The licence is valid for the duration of that login session. When the user logs off the session ends, a licence is freed. This is useful as a way of ensuring software does not get used beyond its licence limit.

The display in the Software Licensing Control window (Image 51.4) shows a number of details regarding the licensing policies that have been put in place.

Description	Licence Type	Max Licences	Licence In Use	Most Licences Used	
Google Chrome Edit	Session	50	2	3	Remove
User	Computer	Last Started	Last Updated		
bmatthews	IT01-01	2015-03-13 16:22:38	2015-03-13 16:25:14		Remove
sjones	IT01-02	2015-03-13 16:22:24	2015-03-13 16:25:09		Remove
Internet Explorer Edit	Computer	100	1	1	Remove
Computer	Last Started				
IT01-01		2015-03-13 16:22:14			Remove
Mozilla Firefox Edit	User	50	2	2	Remove
User	Last Started				
bmatthews		2015-03-13 16:22:31			Remove
sjones		2015-03-13 16:22:19			Remove

Image 65.4 - Software License Usage

There are a number of column headings displaying information about the policy:

Description

This is configured when creating the application in the 'Add Application' window and describes the software that the policy is put in place for.

Licence Type

This is also configured in the 'Add Application' dialogue box and can be set to Computer, User or Session.

Max Licences

This shows the 'Maximum Licences Allowed' as is first configured when creating the policy.

Licence In Use


This is the number of licences that are currently in use for that particular application.

Most Licences Used

Shows the highest number of licences for that application that have been in use simultaneously.

Remove

Click on the 'Remove' button to delete the policy.

Next to each of the policy lines is a  symbol which, when clicked, expands the policy and give greater detail regarding the licence usage. These details vary depending on the 'Type of Licence' that was set against the policy - whether the licence was set to monitor the Computer, User or Session usage. Each of these is displayed in Image 65.4 in the numbered boxes:

1- Type of Licence: Session

The expanded details show you the username of the user that is currently using one of the available licences, as well as the computer they are using, the time they started using the application, and the last time the Licensing Control window was refreshed.

2- Type of Licence: User

When expanded, the details display to you the user who used one of the available licences and the time at which they started using it.

3- Type of Licence: Computer

This displays the computer from which the software licence is being used and the time at which the application was started.

All of the column headings in the 'Software Licensing Control' window can be clicked on to rearrange the list by that particular category, i.e., if you wanted to see a list of the users that are currently using a Microsoft Word licence in order of the time that the application was last started, you can click on the 'Last Started' column under the Microsoft Word licence monitor.

Within the Software Licensing Control window, there is also an option to configure 'Cleanup Settings' (Image 65.5).

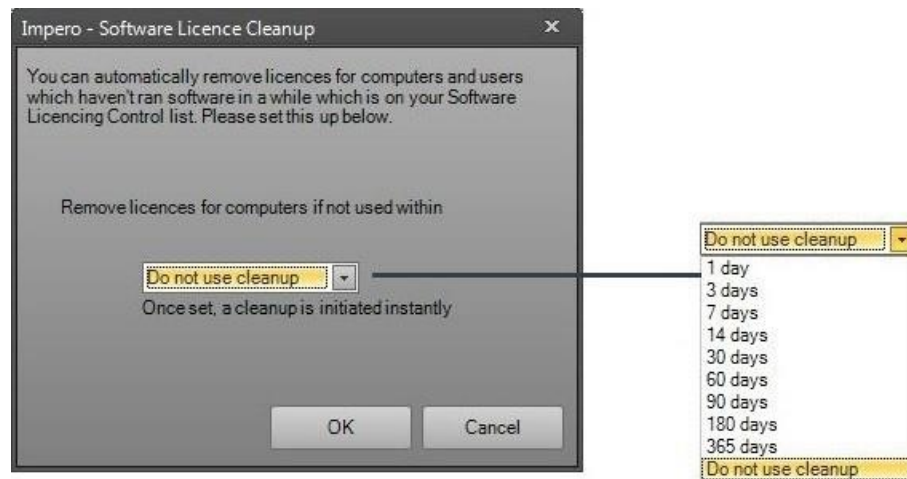


Image 65.5 - Software License Cleanup

This allows you to automatically remove licences from the Licence Control list if they were not used over a predefined amount of time. For example, if this setting is configured to 'Remove licences for computers if not used within 7 days', if the 'Last Started' time in the Licence Control list was over 7 days ago, that licence entry is removed. You can also manually remove licence entries in the Licence Control list by clicking on the 'Remove' button to the right of the relevant entry.

The Software Licensing Control window also gives you the option to 'Export' the policy usage to a CSV file which can be particularly useful for reporting purposes. Simply click on the 'Export' button, select the location to which you wish to save your file, and give it a filename. This can then be opened into a spreadsheet viewing application (Image 65.6).

	A	B	C	D	E	F
1	Software Licencing					
2	=====					
3						
4	Description	Licence Type	Max Licences	Licences In Use	Most Licences Used	Licences Given To
5	chrome.exe	PerSession	50	2	3	bmatthews on IT01-02 "sjones on IT01-01"
6	iexplore.exe	PerComputer	100	1	1	IT01-01
7	firefox.exe	PerUser	50	2	2	bmatthews "sjones"
8						

Image 65.6 - License Usage Export

2.6.10 Deploy MAC

The 'Deploy MAC' tool, accessed from the 'Admin' toolbar, allows you to remotely install software to Apple Mac users. The machine running on an Apple Mac OS must already have the Impero Client installed in order to deploy software to it.

- Firstly, [select](#) the computers in the Computer List that you wish to install the software to.
- Any computers that are selected but are not running an Apple Mac Operating System are recognized by Impero and ignored. In the 'Install Apple MAC Software' window, navigate the left-hand panel to the install package that you wish to deploy to the remote MAC machines (Image 66).

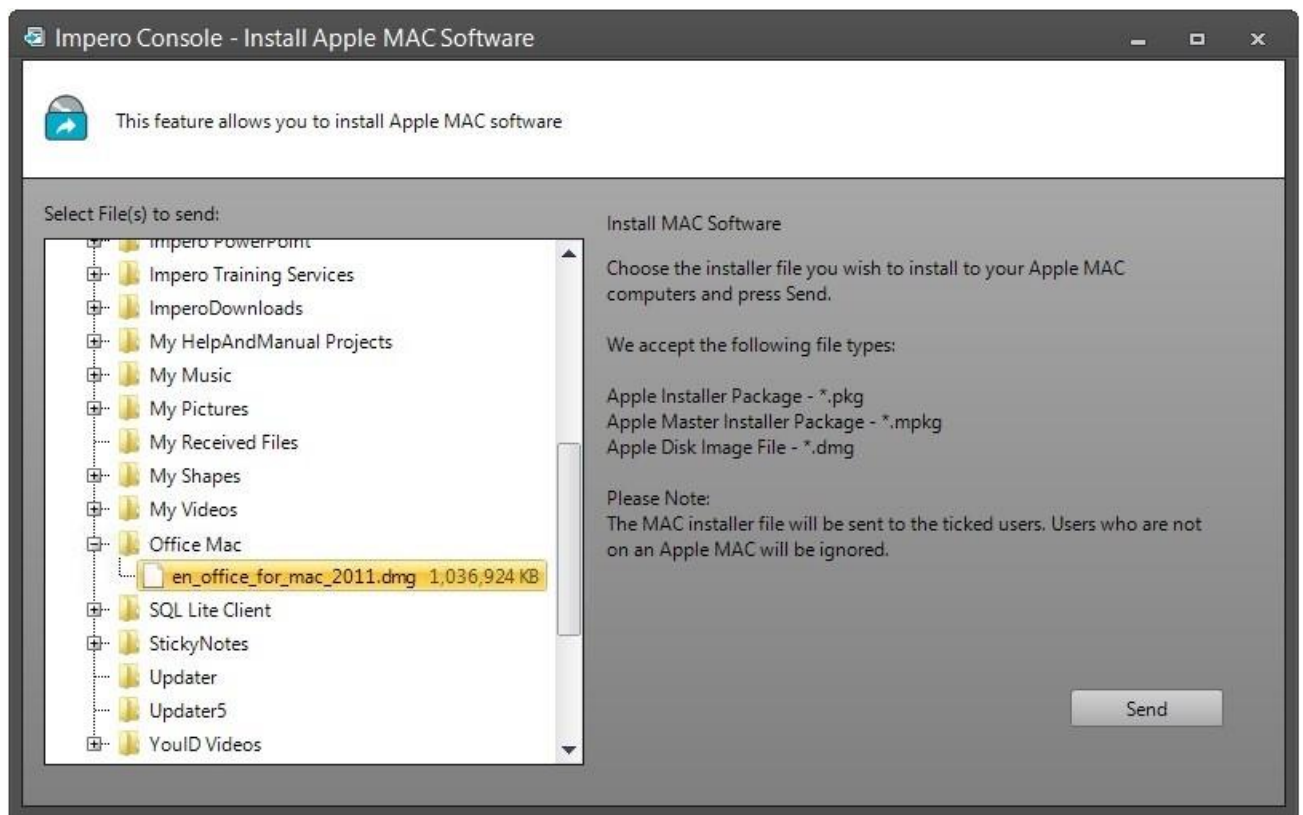


Image 66 - Deploy MAC

- As described in Image 66, only certain file types can be deployed to Apple MACs remotely, *.pkg, *.mpkg, *.dmg.

2.6.11 Resource Graphs

The 'Resource Graphs' item is accessed through the 'Admin' toolbar and is used to monitor computer performance.

- In order to view the performance graphs, [select](#) the computers you wish to monitor from the Computer List.
- From the 'Admin' toolbar, click on the 'Resource Graphs' button.

- This opens a new window displaying graphs showing average CPU, memory and bandwidth usage (Image 67).

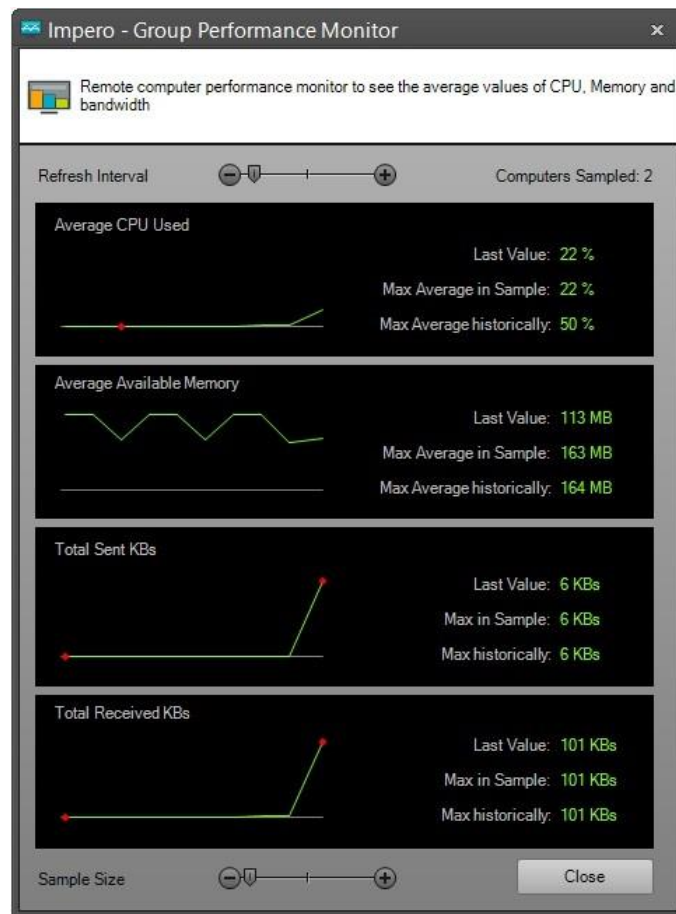


Image 67 - Group Performance Monitor

The graphs display the statistics from the selected computers. In Image 67, the top right of the window shows that a total of 5 computers have been sampled in order to generate the graphs. The 'Refresh Interval' slider bar can be moved up and down to modify how frequently the graphs on the screen are updated with the latest measurements.

The 'Sample Size' slider bar can be used to define how regularly measurements are taken from the remote computers in order to generate the reports, so that there are more frequent readings with a higher sample size (Image 67.1).



Image 67.1 - Sample Sizes

2.6.12 Power Management

The Power Management tool allows you to save money by powering off computers in different rooms across your organisation on a schedule, or even automatically power off computers that have been idle for a specified amount of time. You can also generate reports from this feature in order to fully manage your power usage and see where and when money may be being lost.

In order to access the Power Management feature, first select the Computer Group that you wish to manage. Then click on the 'Admin' toolbar and select 'Power Management'. This opens a new window (Image 68).

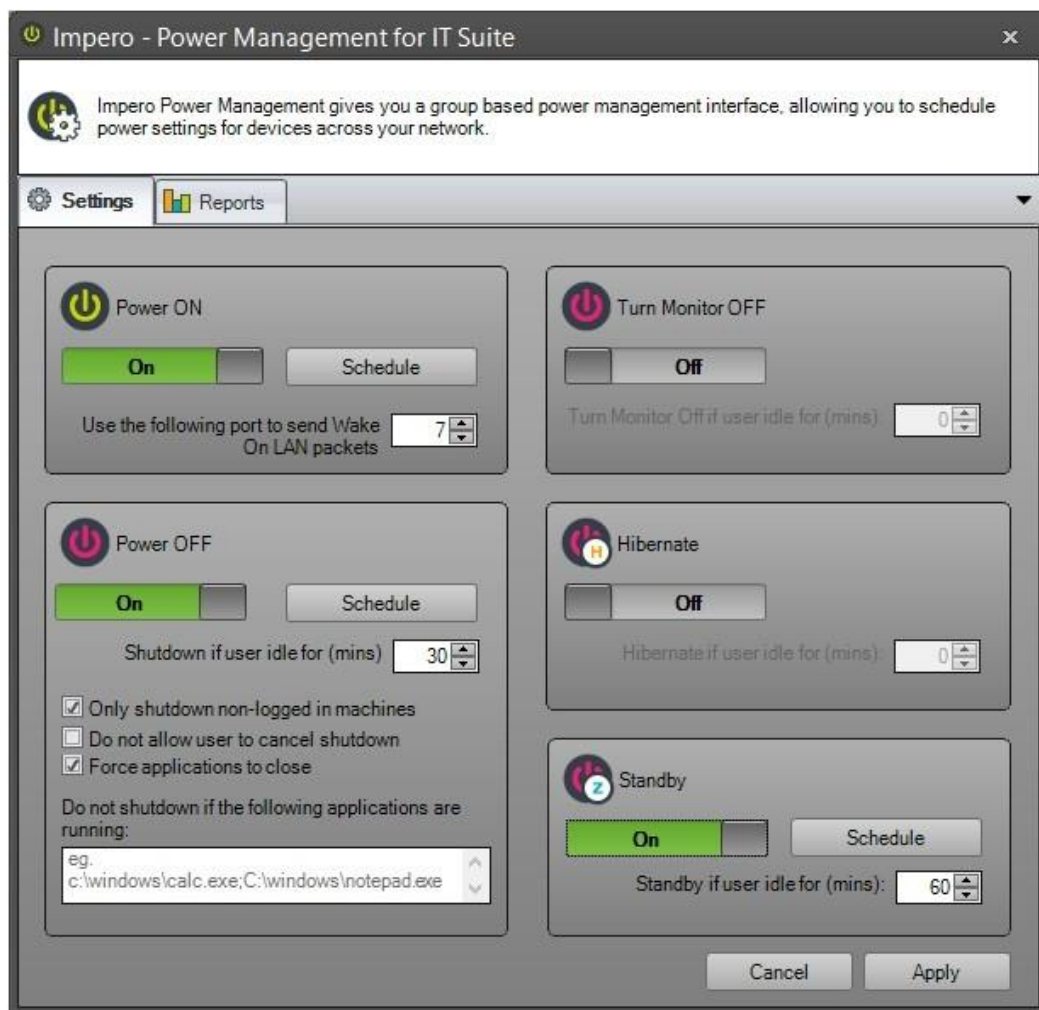


Image 68 - Power Management

By default, all the switches are set to 'Off'. You can turn each switch to 'On' by clicking on the 'On/Off' button. As each power management option is switched on, the other fields within that area become active, with each offering different options per feature.

Power ON

In order for the 'Power ON' feature to work, the remote computers must have 'Wake On LAN' enabled in the BIOS, so that packets can be sent to the computer in order to

power it on. You need to specify which port to send the Wake On LAN packets to, which is by default port 7.

Once this setting is switched to 'On', click on the 'Schedule' button to set up the times at which the machines in your selected group is powered on.

The Wake On LAN setting is by default disabled in Windows 7/Windows Vista.

To enable Wake On LAN

1. Click on the 'Start' button.
2. Type 'Network and Sharing Center' in the Start Search box, and then press 'Enter'.
3. On the Tasks bar, click on 'Change adapter settings'.
4. Right-click the network adapter that you want to configure, and then click on 'Properties'. For example, right-click on 'Local Area Connection', and then click on 'Properties'.
5. If you are prompted for an administrator password or for confirmation, type the password or provide confirmation.
6. Click on 'Configure'.
7. If the network adapter supports Wake On LAN, click to select the 'Allow this device to wake the computer' check box on the Power Management tab. Select the 'Only allow a magic packet to wake the computer' check box, and then click on 'OK'.

Power OFF

You can set up this power management feature to shut down remote computers at a certain time, or if the computers have been idle for a certain amount of time.

Note: Do not set a power off schedule against your 'Entire Network' group, as it shuts down your Impero Server if that machine has the Impero Client running.

Once the 'Power OFF' setting is switched to 'On', click on the 'Schedule' button to set up the times at which the machines in your selected group are shut down. There are then a number of additional options you can configure:

Shutdown if user idle for (mins)

You can shut down machines in the group if they have been idle for a certain amount of time. Enter into this field how many minutes of idle time you wish to wait before shutting down computers.

Only shutdown non-logged in machines

Tick this option if you want this power off policy to only take effect on non-logged-in machines. Any computer that has a user logged in does not shut down.

Do not allow user to cancel shutdown

Tick this option to prevent users on the remote computer from cancelling the powering down of the computers.

Force applications to close

If there are any applications running on the remote computer, this forces them to close prior to the computer shutting down. Any unsaved work is lost.

Do not shutdown if the following applications are running

You can type in the path to a file executable in this text area. If that particular application is running when the shutdown policy becomes active, the computer does not shut down.

Turn Monitor OFF / Hibernate / Standby

These three power management features can all be set to activate if the remote computer has been idle for a certain amount of time, by entering the amount of time in minutes in the available field.

Schedule

All of the power management features can be scheduled to run at specific times by clicking on the 'Schedule' button within the relevant area once it has been switched on. Clicking on the 'Schedule' button opens a new window (Image 68.1).

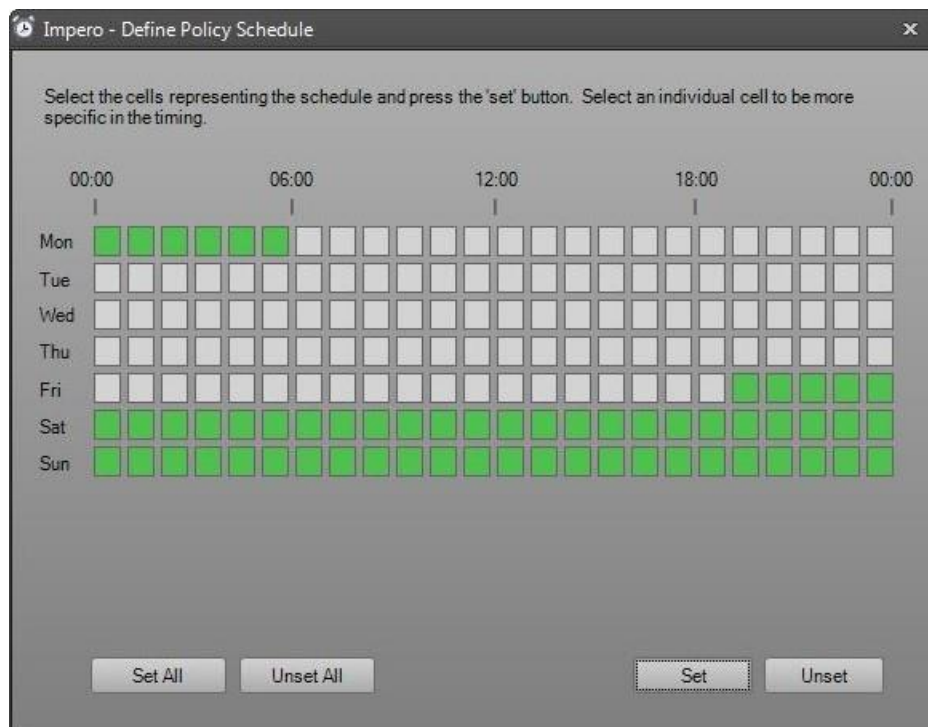


Image 68.1 - Power Management Schedule

The schedule (Image 68.1) is broken down by each day of the week; each day has 24 blocks representing each hour of the day. In order to schedule the policy, click on the hours during which you wish for the policy to become active. When an hourly block is clicked upon, the block turns to a solid green colour, indicating the policy is enabled for that hour. You can click on as many hours, on as many days as you wish for the policy to run. In the example (Image 68.1), the 'Power OFF' policy is set to be scheduled from 19:00 on Friday to 06:00 on Monday, meaning the remote computers in the selected Computer

Group shuts down at 19:00 on Friday and cannot be switched back on again until 06:00 on Monday.

Note: In the above example, the remote computers do not turn back on at 06:00 on Monday. You require a 'Power ON' policy scheduled to begin at 06:00 on Monday. If someone tries to power on a computer in the Computer Group on Saturday, the policy shuts the computer down again.

You also can break down the schedule even further into specific 5 minute blocks. If you click on just one singular hour block in the schedule, an additional option is displayed below it. This option comprises of 12 additional blocks, representing 5 minute intervals within the selected hour. Clicking on these blocks puts a green dot inside it, displaying that the policy is active for that 5 minute period (Image 68.2).

If you have broken down one of the hours into specific smaller time periods, and set that schedule, the hour block within which that time period falls changes into a red dot icon indicating a smaller amount of time than the 60 minutes (Image 68.3).

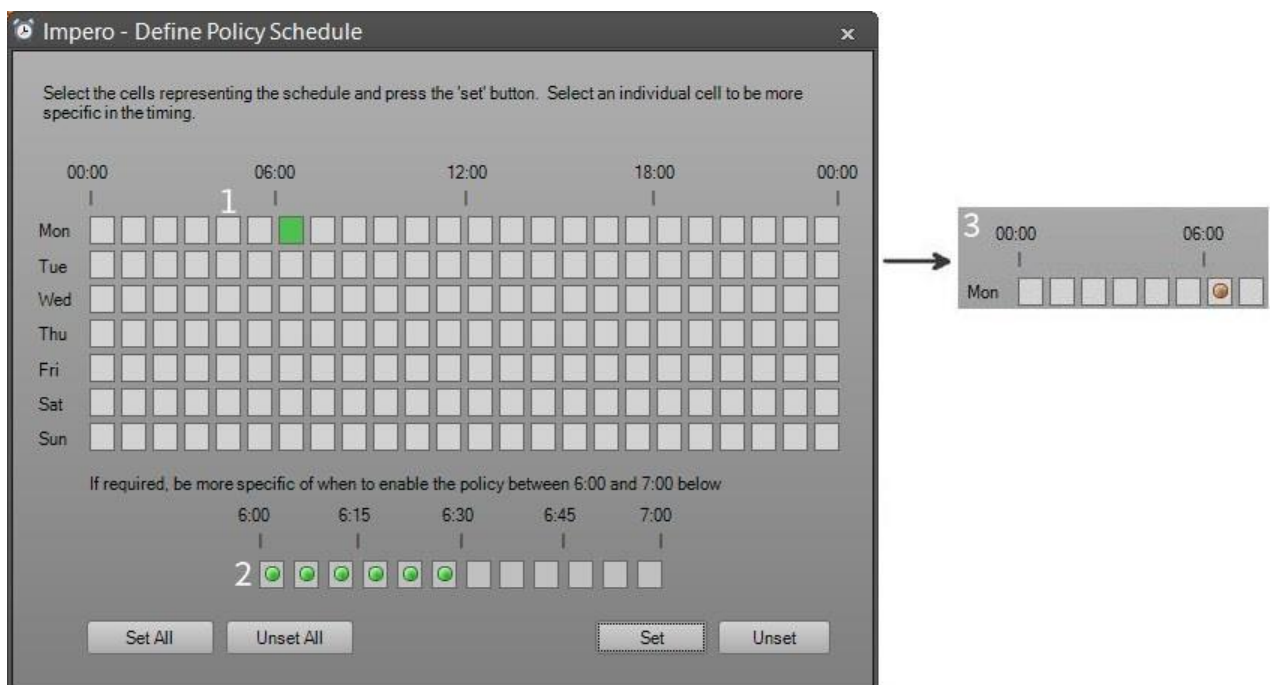


Image 68.2 - Five Minute Intervals

- 1 - Click on an hour block to open up additional, more specific time blocks at the bottom of the window.
- 2 - An additional 12 blocks of 5 minute intervals open up for the hour block that you selected.
- 3 - Once the schedule is set, that hour block has a red icon to indicate that it is set.

Once you are satisfied with the schedule you have created, click on the 'Set' button to activate it. The 'Unset' button removes the schedule. The two additional buttons, 'Set All' and 'Unset All', selects/deselects all the blocks in the schedule.

Hint: You can use the 'Copy Command' to copy one schedule block to multiple other blocks. For example, if you scheduled a policy to begin at 6:30am on Monday and wish to set the same schedule to start Tuesday - Friday, simply click on the Monday schedule block, and drag your cursor downwards onto the same block on

Tuesday - Friday, then click on 'Set'. Those blocks are then also populated by the red dot icon as the 6:30am schedule has been copied into them.

2.6.12.1 Reports

You can generate power usage reports by clicking on the 'Reports' tab at the top of the Power Management window, or by selecting 'Reports' from the contextual menu item (Image 69).

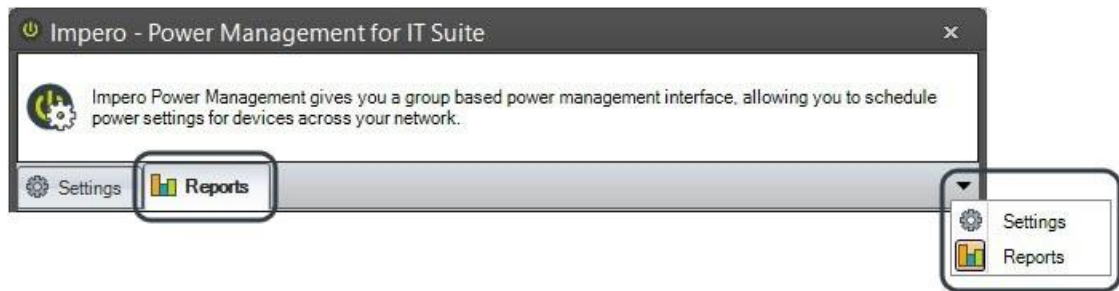


Image 69 - Reports Tab

In order to generate your report, you are required to select which Computer Group you wish to generate the report for, and select a time range from which the report is generated. You can add a secondary time range by clicking on the 'Add Range 2' button, which then allows you to compare your reports between the two ranges.

You are then able to enter 'Energy Cost' and 'Energy Consumption' rates specific to your organisation in order to generate as accurate a report as possible (Image 69.1).

Impero also caters for a 'Double Rate Energy Cost' whereby you can specify a day cost and a night cost, and which hours of the day those costs apply for. This is then factored into the usage calculations when the report is generated.

Image 69.1 - Generate Report

- 1 - Select the Computer Group and date range for the report you wish to generate.
- 2 - Enter your organisation's energy cost (£ per KWh) and select whether you use a Single Rate or a Double Rate. If you enter a Double Rate, Impero generates the report based on the times and costs specified here.
- 3 - Enter your organisation's power usage per PC, when on and when in standby mode. By default, Impero loads an average consumption rate here, which you can modify.
- 4 - If there are specific reports you need to run regularly, these can be saved and reloaded through the 'Saved Report Definitions'. To save a new report, create the 'Report Criteria' and click on the 'Save' button. You are then prompted to name your report definition. This report is then always available through the 'Saved Report Definitions' drop-down list when you come to the Reports tab.

Note: To work out the power usage we have to make an estimate of the power used by the average computer. Various sources tell us that it ranges from between 60w and 600w which gives us very little information we can use. For this reason, we have chosen 180 watts as the average power consumption for a standard computer setup (monitor and all peripherals included). When you produce reports, you can change this value, but Impero believe that 180watts is a very fair (maybe slightly lower than average) combined power consumption. Also, we have set the 'cost per KWh of electricity' to 15p (in the UK), as of 31st March 2011 the energy prices in the UK stand at approximately 17p (day rate) per KWh.

By setting the power consumption and cost of electricity to conservative values you can be sure that the potential savings produced in the usage reports display the MINIMUM saving (you are likely to achieve much higher savings).

Once you are happy with the criteria you have set up, click on the 'Generate Report' button in order to view your results. This may take a short while to load depending on the criteria you have set. When the report has finished compiling, you are presented with a new window (Image 69.2) that displays a summary of the generated report. There is also a 'Detailed Breakdown' tab, a 'Usage Analysis' tab, a 'Compare' tab and a 'User Usage' tab across the top of this window for further detail.

Summary

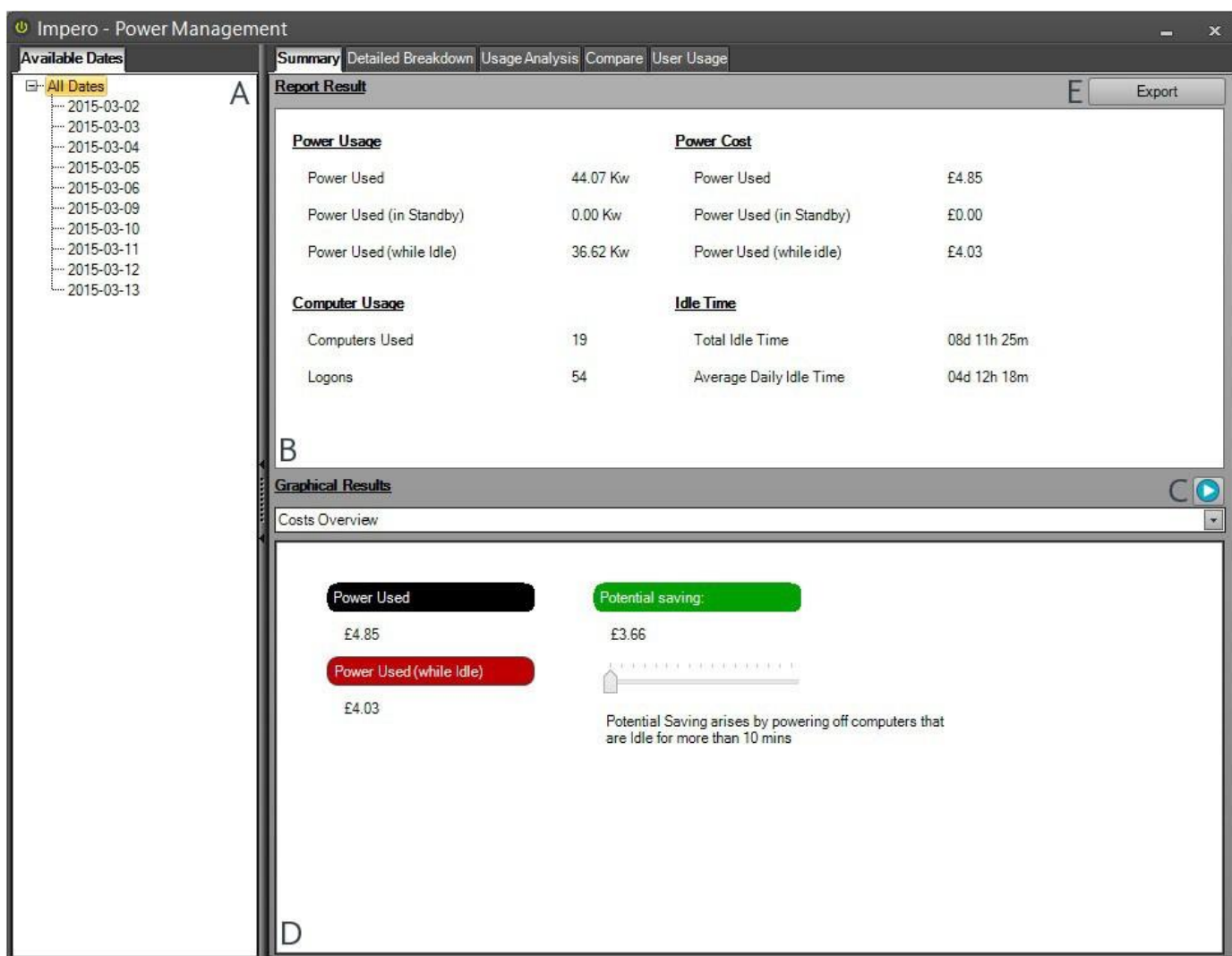


Image 69.2 - Generated Report

- A - The range of dates you selected in the 'Report Criteria'. Click on one to break down the report per day.
- B - Results of the report regarding power usage and cost.
- C - Further graphical results are available to view based on the report you generated. By default, this window automatically scrolls through all the available reports one-by-one. Stop the automatic scrolling by clicking on the stop icon and restart it by clicking on the play icon.
- D - The 'Cost Overview' view is selected in the drop-down list, which displays the cost of power used. Use the slider bar to show how much you could potentially save by shutting down computers after certain amounts of idle time. Unless you have

clicked on the stop icon, this view automatically scrolls through the different available reports. E - You are able to export your report to a PDF document.

The 'Summary' tab shows you a report result panel displaying details of the 'Power Usage', 'Power Cost', 'Computer Usage' and 'Idle Time' for the entire date range that you selected. You can break this down by selecting specific dates from the selected range in the left-hand panel.

The bottom panel displays 'Graphical Results' with a number of options that you can select from a drop-down list. The default selection is 'Cost Overview' which shows you the cost of 'Power Used' and 'Power Use (while Idle)'. You can also see a calculation of how much 'Potential saving' you could make by powering down machines after a certain amount of idle time. You can increase/decrease this idle time by using the slider bar and see a calculation of how much money you could save by powering down idle machines after that amount of time. You can then go back to Power Management and create a policy to shut down machines after a set amount of idle time in order to start saving money.

There are a number of other options in the 'Graphical Results' drop-down list which changes what you see in the bottom panel:

Power Cost (while computers are turned on and in Standby) - this generate a graph on your screen showing the cost of having computers turned on and in standby mode per day selected in your report generation criteria.

Standby Cost - this generates a graph on your screen showing the cost of having computers in standby mode on each day selected in your report generation criteria.

Idle Cost (money wasted due to computer idle time) - this generates a graph on your screen showing the amount spent on computers left idle on each day selected in your report generation criteria.

Power Usage in KWh (while computers are turned on and in Standby) - this generates a graph on your screen displaying the power usage (KW) while computers are turned on and in standby mode on each day of your report generation criteria.

Power Usage in KW (while in Standby) - this generates a graph on your screen displaying the power usage (KW) while computers are in Standby mode on each day of your report generation criteria.

Power Usage in KW (while computer is idle) - this generates a graph on your screen showing the power usage (KW) while computers are left idle on each day of your report generation criteria.

Show Idle Computers - this displays a list of all the computers in your selected Computer Group and their idle times over the selected date range. You are able to select each computer to see a further breakdown of their idle times and the power cost during that idle time (Image 55.3).

Computer Name	Idle Time
IT01-01	00d 12h 11m
IT01-02	00d 09h 03m

Selected Computer Info

Average Logons: 27

Average Time On: 05d 16h 56m

Average Time Logged On: 00d 15h 06m

Average Idle Time: 05d 01h 50m

Average Wasted Power: 22.2KW

Average Money Wasted: £2.41

Minimum Hours idle: 1

Refresh Export To CSV

Image 69.3 - Show Idle Computers

- 1 - A list of the Computer Names and their Idle Times over the specified date range. Click on to select a computer to view further information.
- 2 - A display of further information on the computer selected in the left-hand panel list.
- 3 - You can select to view only computers that have been idle over a certain amount of time. Select the time period here and click on 'Refresh'.
- 4 - You can export the results to a CSV file to view in spreadsheet form.

The report window also has two further tabs available across the top of the window to view additional details on the report that has been generated.

Detailed Breakdown

When you click on the 'Detailed Breakdown' tab, by default, the 'All Dates' range is selected in the left-hand panel. In this view, you can then see a list of the computers in the Computer Group with details about that computer usage over the selected date range. If you click on any of the dates in the left-hand panel, you are then able to see some further reporting tools (Image 69.4).

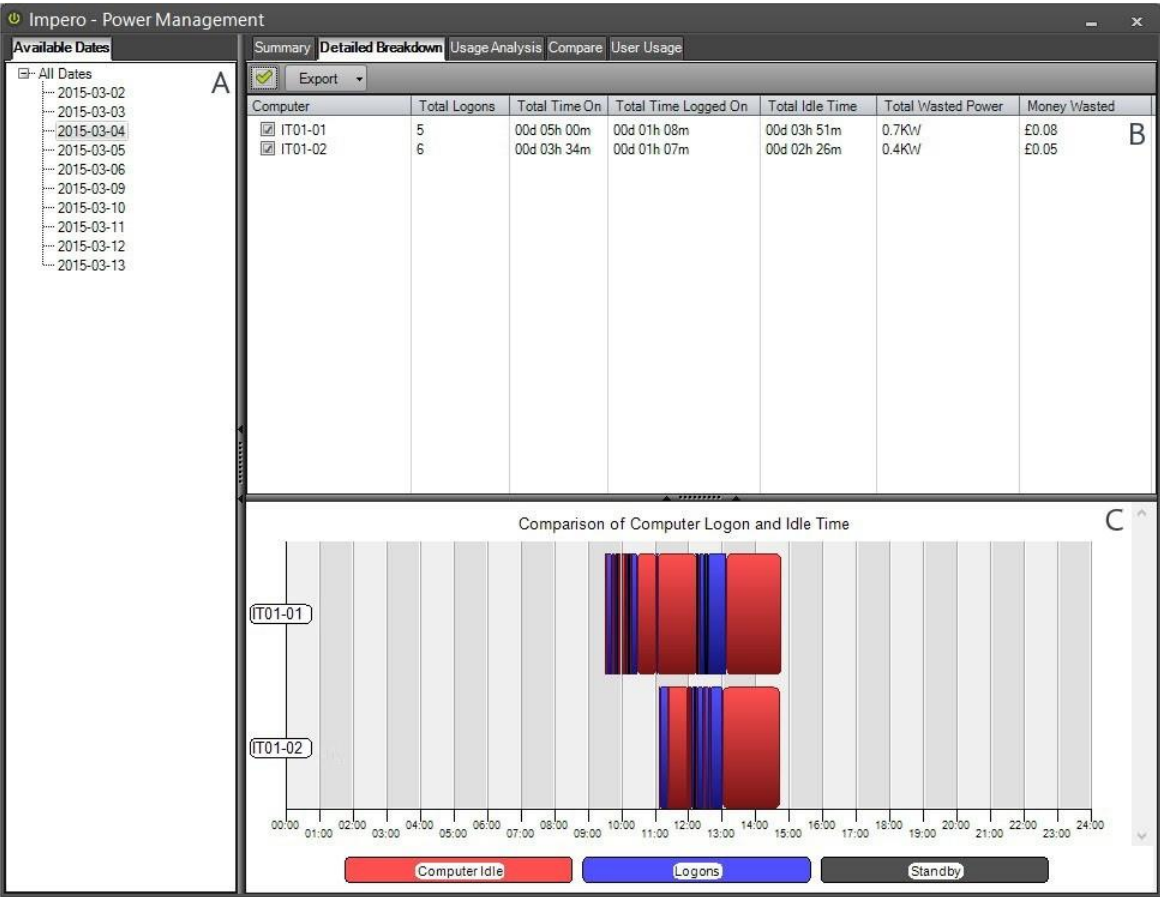


Image 69.4 - Detailed Breakdown

- A - Select a date from the date range to see further detail on the right-hand side.
- B - View a list of all the computers in that Computer Group and their usage on the selected date. Select computers by clicking on the checkbox next to them to view a comparison in the panel below or click on the 'Select All' icon to the left of the 'Export' button.
- C - A graphical comparison of Logon Time and Idle Time from the selected computer(s) in the panel above.

Click on the 'Export' button towards the top of the window to export the table (CSV), or the graphical display (JPG), or both (PDF).

Note: Machines such as servers, terminal servers etc display bogus results in this display because every logon session is treated as a computer. Therefore the 'Total Time Logged On' is greater, such as the example in the fifth row of results in image 69.4.

Usage Analysis

Selecting the 'Usage Analysis' tab presents you with two further tabs - 'Idle Analysis' and 'Group Utilisation'.

The 'Idle Analysis' tab allows you to specify a 'Start Date' and an 'End Date'; a 'Time Period Start' and 'Time Period End'; and a 'Minimum Hours Idle', so that you can view idle times of computers during specific times, i.e., business hours. You can then see the cost of these computers being idle during certain hours (Image 69.5), as well as a graphical view of power usage over that time period.

Computer Name	Idle Time	Usage	Cost	
IT01-01	01d 20h 2...	00d 10h...	£00.88	
IT01-02	00d 06h 1...	00d 01h...	£00.12	

Start Date

02/05/2013

End Date

02/05/2013

Time Period Start

09.00

Time Period End

18.00

Minimum Hours Idle:

1

Export

Refresh

Image 69.5 - Idle Analysis

The 'Group Utilisation' tab allows you to view machine utilisation in specific Computer Groups. You can specify a Computer Group, a 'Start Date' and 'End Date', and a 'Time Period', to see how many machines from that group were used in that time period.

Compare

Select the 'Compare' tab to compare computer usage between specified dates. On the left-hand side of the window, first select the date for which you wish to view usage information for the computers within the group you are reporting from. Then, select the date that you wish to compare this usage against.

The right-hand side of the window is then update to display a list of all computers (Image 69.6) that have been used on the two selected dates within the group you are reporting from.

Impero - Power Management							
Available Dates							
<div><input type="checkbox"/> All Dates</div> <div><input type="checkbox"/> 2015-03-02</div> <div><input type="checkbox"/> 2015-03-03</div> <div><input type="checkbox"/> 2015-03-04</div> <div><input type="checkbox"/> 2015-03-05</div> <div><input type="checkbox"/> 2015-03-06</div> <div><input type="checkbox"/> 2015-03-09</div> <div><input type="checkbox"/> 2015-03-10</div> <div><input type="checkbox"/> 2015-03-11</div> <div><input checked="" type="checkbox"/> 2015-03-12</div> <div><input checked="" type="checkbox"/> 2015-03-13</div>							
Summary Detailed Breakdown Usage Analysis Compare User Usage							
Export Comparing 2015-03-13 To 2015-03-12							
Computer	Logons	Time On	Time Logged On	Idle Time	Wasted Power	Money Wasted	
IT01-01	-5	00d 08h 45m	00d 00h 49m	00d 07h 55m	1.6KW	£0.16	
IT01-02	1	00d 08h 30m	00d 08h 57m	00d 00h -26m	0.2KW	-£0.01	

Image 69.6 - Compare

If a computer in the list displays in red, it means that the computer was not logged onto on the comparison date. The other columns in the list are displayed in either red or green to signify whether it was used more or less on the comparison date.

Click on the 'Export' button in order to export this table of information to CSV format.

User Usage

Select the 'User Usage' tab in order to view user login information on specified dates. On the left-hand side of the window, select the date for which you wish to view login information for the computers within the group you are reporting from.

The right-hand side of the window is then updated to display a list of all the users that were logged into computers within the selected group, and the amount of time for which those users were active on those computers (Image 69.7).

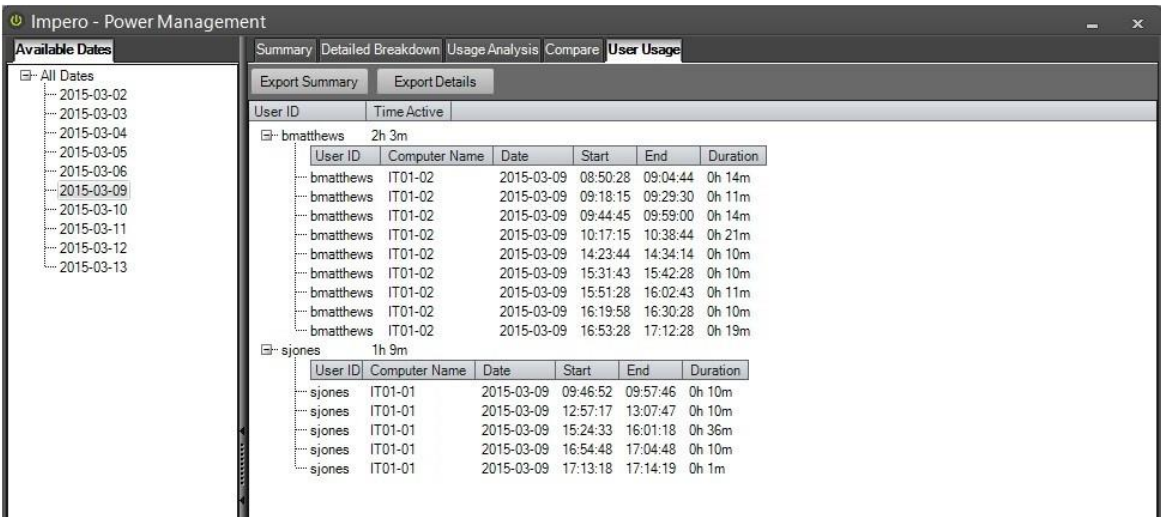


Image 69.7 - User Usage

You can expand any of these user entries by clicking on the icon to the left of the username to view more detailed login information, such as which computer the user logged into, the time at which the user session began and ended, and the duration for which the user was active.

Click on the 'Export Summary' button in order to export the user logon information to CSV format. Click on the 'Export Details' button in order to export the user login information along with the detailed information to CSV format (Image 69.8).

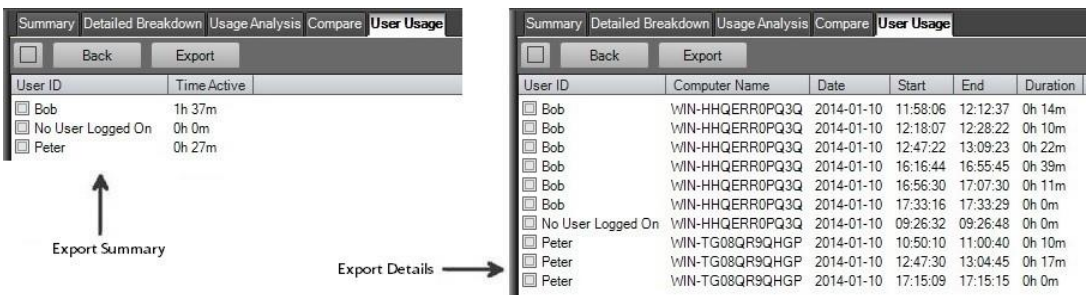


Image 69.8 - User Usage Export

2.6.13 USB Tracking

Impero has an enhanced USB Tracking feature that allows you to track USB device usage across your network and allow or block specific devices. In order to access this feature, select 'USB Tracking' from the 'Admin' toolbar. This opens a new window to the 'Network Devices' tab (Image 70).

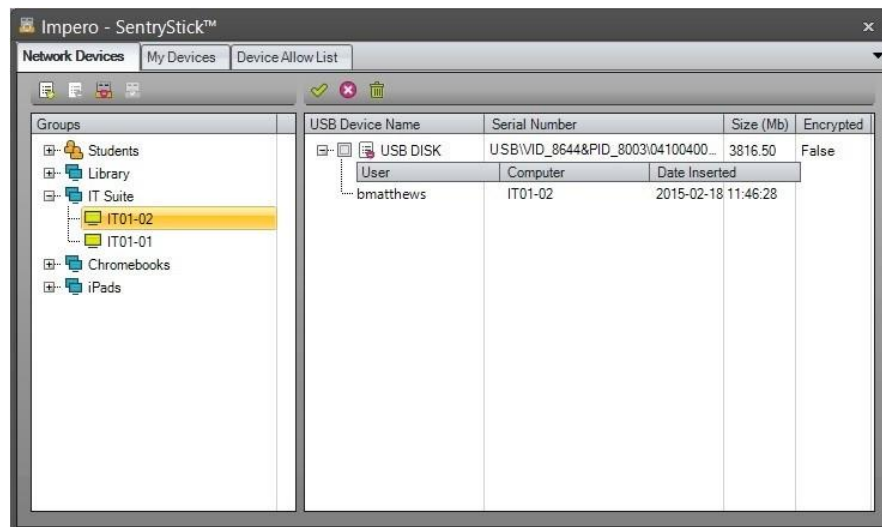





Image 70 - USB Tracking


Network Devices


You can use this tab to view USB device usage across your network. On the left-hand side you see a list of the Computer Groups that are created in Impero; click on the  icon to expand each Computer Group and view all the machines that belong to that group. Click on a specific machine in the list to view on the right-hand side, any USB devices that are used on that machine, as well as the serial number of the device, its size and whether or not the device is encrypted. You can click on the  icon next to the USB Device Name in order to view which user used that particular device and the date and time at which it was used.

There are a number of other options available to you from this tab. If you select any of the Computer Groups on the left-hand side of the window, there are four icons available above the 'Groups' panel.

 Allowed devices only - This only allows access to USB devices that have been added to the 'Device Allow List' for this group.

 Allow all devices - This allows all USB devices to be used in this group.

 Allow only encrypted devices - This allows only encrypted USB devices for this group.


 Allow unencrypted devices - This allows the use of unencrypted USB devices in this group.

If any of these restrictions are placed upon a group, and a user attempts to access a USB device that is not permitted, they see an error message (Image 70.1) and are unable to access the drive.



Image 70.1 - Access Denied



When you have selected a computer in the left-hand panel, you can select a specific USB device in the right-hand panel which then enables three further icons above the USB device list.

 Add to allow list - Add the selected USB device to the list of allowed devices. The 'Device Allow List' then populates with the selected USB device.


Remove from allow list - If the selected USB device has been added to the 'Device

 Allow List', click on this icon to remove it.

 Delete - Remove the selected device from the list view.

If a device within the list is added to the allow list, you see the icon next to the device name change from  to , so that you can quickly identify any machine in the list that has been added to the allow list.

My Devices

Click on the 'My Devices' tab to see a list of the USB devices that have been used when logged in with your username. You can see the serial number of your device, the size and whether or not the device is encrypted. Click on the  icon to view a list of the date and times at which the device was used. You can mark the check box next to your device name and then use the above icons to add your device to the 'Device Allow List' or remove it.

Device Allow List

Select the 'Device Allow List' tab to view a list of the USB devices that have been permitted within the 'USB Tracking' feature. If a Console user then specifies 'Allowed devices only' for a group from within the 'Network Devices' tab; then only USB devices contained within this list are accessible on machines within that group. You can mark the check box next to a device name and then use the above icon to remove the device from the allow list.

You can also use Advanced Policies to enforce restrictions on USB device usage. In the Impero Console, select the group that you wish to restrict device usage on and use an [Action Policy](#) to allow only allowed or encrypted devices. This allows you to enforce these restrictions on a scheduled basis if you wish.

2.6.14 Inventory

The 'Inventory' feature catalogues hardware, software, and operating system information for all machines with the Impero Client installed to it. Reports can be created from this tool to support asset tracking and hardware maintenance of computers.

Note: The Inventory of a machine is taken when the Impero Client is first installed. In order to update the Inventory, you are required to create a 'Perform Inventory' [Action Policy](#) to run.

- In order to view inventories, first select the computers you wish to analyse in the Computer List.
- Click on the 'Admin' toolbar and select 'Inventory'.
- You are then presented with the Inventory window (Image 71).

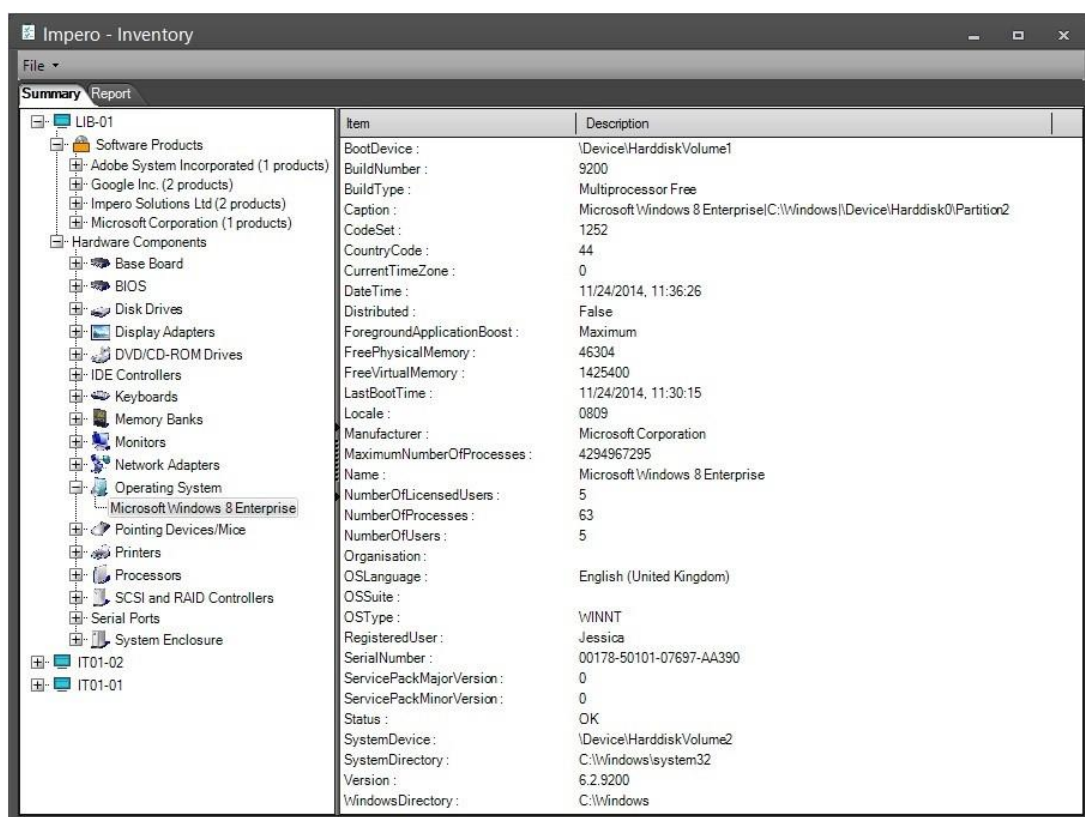
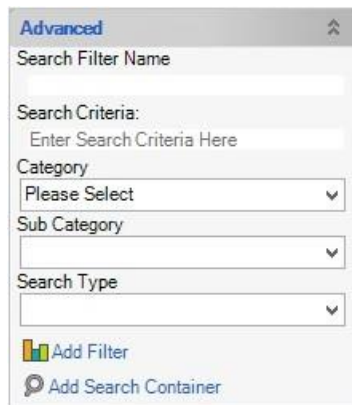


Image 71 - Inventory

By default, the Inventory window opens to the Summary tab, which is split into two panels. In the left-hand panel there is a list of the computers that were selected in the Computer List. You can click on any of these computers to see general system information on the right-hand side. The computer can be further expanded by clicking on the + icon to the left of the Computer Name to show detailed system information regarding the hardware and software installed on the selected machine. Clicking on any of the items on the left-hand side display a detailed list of information in the right-hand side relating to the selection on the left.

You can also generate reports on the selected machines allowing you to review and compare machine specifications. Select the 'Report' tab at the top of the window. You

can then use the 'Advanced' panel in the top left-hand corner of the window (Image 71.1) to set up the reporting criteria.



Search Filter Name – Enter a name for the report that you are going to create. If you are running more than one report, this name must be unique.

Search Criteria – Enter the term that you are searching for in this field. What you enter here is dependent on your selections in the following drop-down lists.

Category – Select from the drop-down list which Inventory category you are searching on, i.e., Operating System, Processor, Software Product Installed etc.

Image 71.2 - Report Criteria

Sub Category - This drop-down list populates depending on your selection in the 'Category' drop-down list.

Search Type - Select from this drop-down list how you wish for your search to behave. It can be any of the following selections:

Exact Match - This report searches your Category/Sub Category selections for an exact match of the entry you have typed in the 'Search Criteria' field.

Match Sequence - This report searches for the term you have entered into the 'Search Criteria' field anywhere within the Category/Sub Category you have selected, so it essentially 'wildcard' the term you specified.

Avoid Exact Match - This report searches your Category/Sub Category selection for any term that does not exactly match the entry you have added to the 'Search Criteria' field.

Avoid Sequence - This report searches your Category/Sub Category selection for any term that does not match any part of the entry you have added to the 'Search Criteria' field, so it essentially 'wildcard' the term you have entered and return anything that does not contain the term you specified.

Once you set up your reporting criteria, click on the 'Add Filter' button to carry out your search. This then returns your results into a table on the right-hand side of your window (Image 71.3).

MACHINE	PRODUCT - NAME	PRODUCT - VENDOR	PRODUCT - VERSION	PRODUCT - INSTALL DATE	PRODUCT - LOCATION	PRODUCT - UNINSTALL STRING
LIB-01	Google Chrome	Google Inc.	37.0.2062.124	2014/08/07	C:\Program Files (x86)\Google\Chrome\Application	"C:\Program Files (x86)\Google\Chrome\Application\37.0.2062.124\Installer\setup.exe" --uninstall --multi-install --chrome --system-level
IT01-02	Google Chrome	Google Inc.	40.0.2214.115	2014/08/06	C:\Program Files (x86)\Google\Chrome\Application	"C:\Program Files (x86)\Google\Chrome\Application\40.0.2214.115\Installer\setup.exe" --uninstall --multi-install --chrome --system-level
IT01-01	Google Chrome	Google Inc.	40.0.2214.115	2014/08/29	C:\Program Files (x86)\Google\Chrome\Application	"C:\Program Files (x86)\Google\Chrome\Application\40.0.2214.115\Installer\setup.exe" --uninstall --multi-install --chrome --system-level

MACHINE	PRODUCT - NAME	PRODUCT - VENDOR	PRODUCT - VERSION	PRODUCT - INSTALL DATE	PRODUCT - LOCATION	PRODUCT - UNINSTALL STRING
LIB-01	Adobe Common File Installer	Adobe Systems Incorporated	1.00.0000	2014/05/09	C:\Program Files (x86)\Common Files\Adobe	MsiExec.exe /I{9EDBA74D-0636-4C39-BFDD-F894678E5839}
IT01-02	Adobe Acrobat 8 Professional - English, Français, Deutsch	Adobe Systems	8.0.0	2014/01/28	C:\Program Files (x86)\Adobe\Acrobat 8.0	No uninstall string found
IT01-01	Adobe Refresh Manager	Adobe Systems Incorporated	1.8.0	2015/01/02	C:\Program Files (x86)\Common Files\Adobe\ARM\1.0	MsiExec.exe /I{AC76B866-0804-1033-19E9-001802114130}
IT01-01	Adobe Reader XI (11.0.10)	Adobe Systems Incorporated	11.0.10	2014/12/19	C:\Program Files (x86)\Adobe\Reader\11.0\Reader	MsiExec.exe /I{AC76B866-0804-1033-19E9-001802114130}
IT01-01	Adobe Flash Player 16 NPAPI	Adobe Systems Incorporated	16.0.0.305	no install date found	no install path found	C:\Windows\System32\Macromed\Flash\FlashUtil32_16_0_0_305_Plugin.exe --mainsite

Image 71.3 - Inventory Report

2.6.15 Log Viewer

The Log Viewer gives you access to all the events that have been captured by Impero. The Log Viewer gives administrators the ability to get comprehensive, in-depth data on computer/user usage and build reports based on various criteria.

Note: The logs displayed in Log Viewer only goes back as far as your network administrator defines. The retention period for log files is specified in the Impero Server.

- In order to access the Log Viewer, click on the 'Admin' toolbar and select 'Log Viewer'.
- You are then presented with the Log Viewer window, from which you can select to view the logs in a number of different ways.
- On the left-hand side of the window, you see an 'Archive' drop-down list (Image 72).

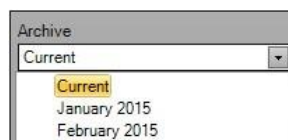



Image 72 - Archive

- This drop-down list contains each monthly archive that Impero automatically created.

- If you are looking for a particular event, and know when it took place, select the relevant monthly archive here. The 'Current' selection displays all logs that are currently held by Impero.
- Once you made a selection in the drop-down list, you can browse the 'Available Logs' panel below (Image 72.1).



Image 72.1 - Available Logs

- You can browse the available logs by date, user, computer or the Impero groups that your user has access to. Click on the  symbol next to each of these options to expand the list.
- The results on the right-hand side of the window is updated based on your selection in the 'Available Logs' panel.
- If you expand the 'Date' option and select a date, you can quickly see all violations generated by all users on that date, and all printed documents from that date.
- If you expand further and select a specific user or computer, you can see a variety of activity information from that user/computer (Image 72.2).

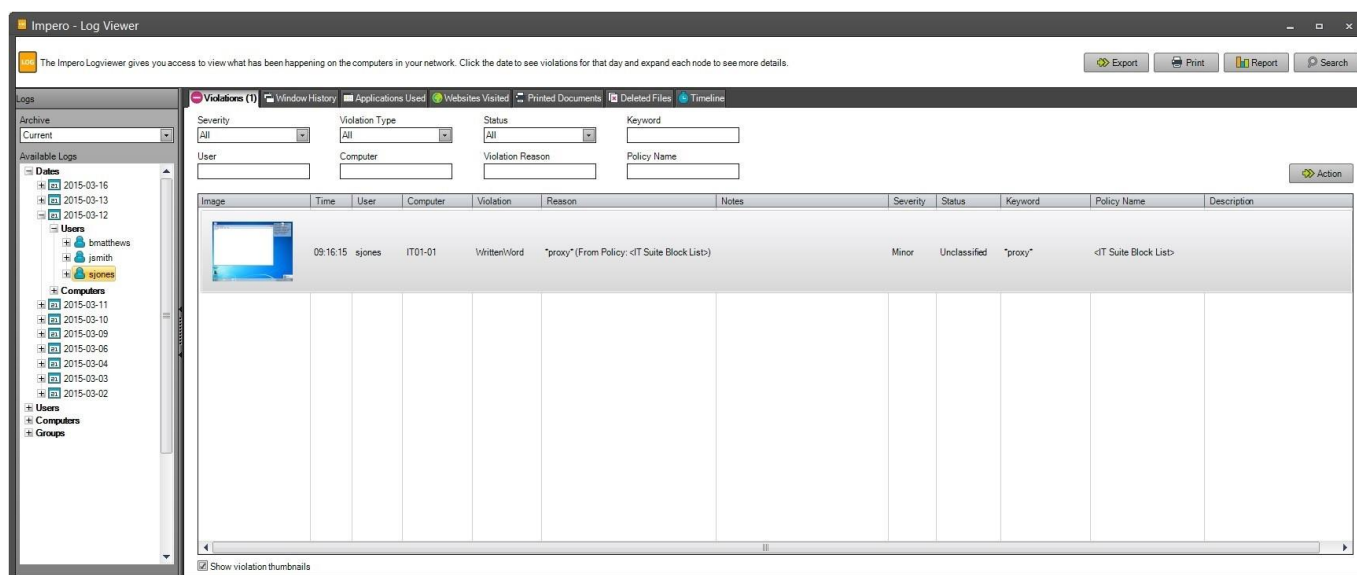


Image 72.2 - Log Viewer

Violations

This tab contains a list of all the violations generated by the selected user/computer on the selected date. There are a number of columns of information displayed in this tab:

Image - If a screenshot is taken when the violation is triggered, it is displayed in this column. Click on it to view a larger version of the image.

Time - The time at which the violation was generated.

User - The user that generated the violation.

Computer - The computer on which the violation was generated.

Violation - The type of block that triggered this violation, i.e., Website, Window Caption, Application.

Reason - Details on the resource that was accessed to trigger this violation.

Notes - Any notes that have been added to this violation. This column includes a link to view any video recording that is taken as part of the violation.

Severity - The severity level applied to this violation.

Status - That status currently applied to this violation.

Keyword - The keyword that triggered this violation based on the created policy.

Policy Name - The name of the policy that triggered this violation.

Description - This field populates with the 'Reason for this block/Glossary of Term' if one was added when the policy was created.

Window History

This tab contains a list of all the window captions that were opened by the selected user/computer on the selected date.

Applications Used

This tab contains the path of all the applications that were opened by the selected user/computer on the selected date.

Websites Visited

This tab contains the full URL of every website that was accessed by the selected user/computer on the selected date. You can double-click on any of these URLs in order to open the web address into your default browser to see what the page contains. For further information on website logging, please see '[Browser Extensions](#)'.

Printed Documents

This tab contains information on every page that was sent to a printer by the selected user/computer on the selected date.

Deleted Files

This tab contains the filename of every file that was deleted from the 'My Documents' area by the selected user/computer on the selected date.

Timeline

This tab combines all Violations, Window History, Applications Used, Websites Visited, Printed Documents and Deleted Files information from the previous tabs and display them in the order that they occurred.

- You can use the eight fields at the top of this window to filter the violations for more specific entries (Image 72.3).

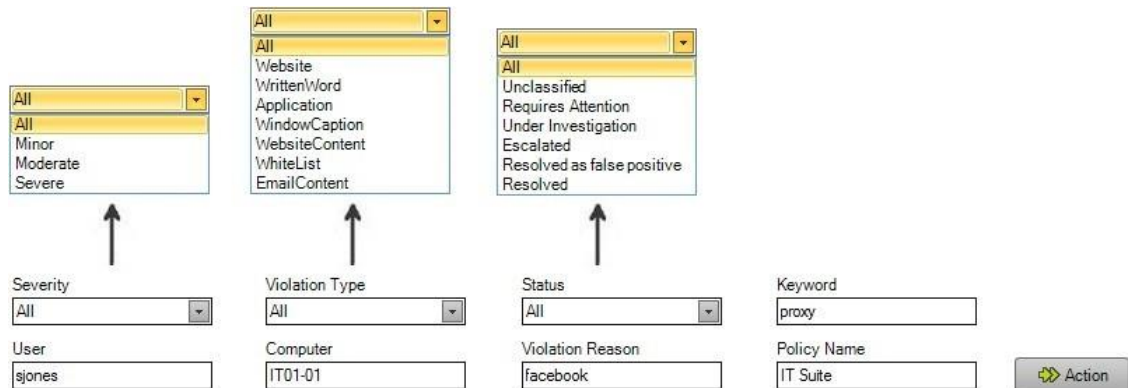


Image 72.3 - Log Viewer - Filters

- In the Severity, Violation Type and Status fields, select an option from the drop-down list; the violation list updates dynamically to reflect your filters.
- In the User, Computer, Violation Reason, Keyword and Policy Name fields, type in the filter you wish to use; the violation list updates dynamically to reflect your filters.
- If you click on an entry in the Log Viewer to select it, you can then click on the 'Action' button to see a variety of actions that you are then able to carry out on the entry.
- You can also right-click with your mouse on any entry to perform the same actions (Image 72.4).

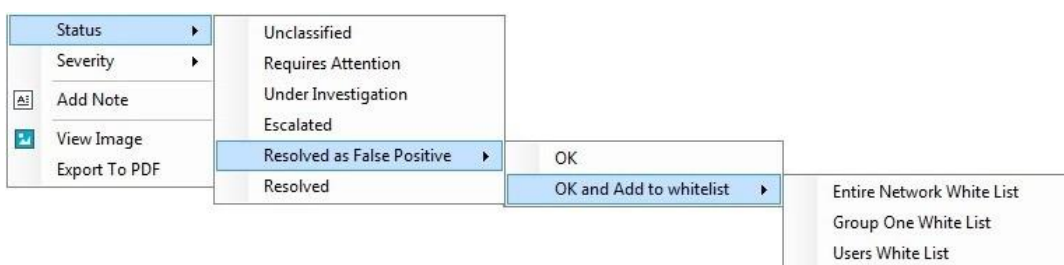


Image 72.4 - Log Viewer - Actions

Status

Change the status of the event to 'Unclassified', 'Requires Attention', 'Under Investigation', 'Escalated', 'Resolved as false positive' * or 'Resolved'.

Severity

Change the severity of the event to Minor, Moderate or Severe.

Add Note

You can add a note to the event which then becomes visible on the main Log Viewer window, in the 'Notes' column.

View Image

If there is a thumbnail of the violation in the Log Viewer window, click on 'View Image' to see a larger version of the image, with the options to 'Save' or 'Print' the image.

Export to PDF

Export the violation screenshot and a number of details relating to the violation to a PDF file.

* Resolved as false positive

The 'Resolved as false positive' option has its own contextual menu offering two further options.

OK

This simply resolves the selected log event as a false positive. A note is automatically added to the event to inform console users that it has been resolved and display the name of the person who specified that the event has been resolved (Image 72.6).



Image 72.6 - Resolved as False Positive

OK and Add to whitelist

Selecting this option resolves the event as a false positive as above but also gives you the additional option of adding the policy item to an existing whitelist. This helps ensure that the false positive does not occur again. Select the whitelist that you would like to add to, which opens the 'Add/Edit Policy Item' window (Image 72.7) and pre-populate the whitelist item for you based on the event that you are currently viewing. You can then modify the policy item as you wish and click on the 'Add' button to add the event to the whitelist.



Image 72.7 - Resolve as False Positive & Add to Whitelist

Note: The original policy item that created the violation remains active, but the whitelist item supersedes it.

- Four further buttons at the top of the window allow you to Export, Print, Report and Search on events in the Log Viewer.

2.6.15.1 Export

The Log Viewer gives you the ability to export information to CSV format. The export behaves differently based on your current selection in the 'Available Logs' panel on the left-hand side of the window.

If you selected a date on the left-hand side, you can export a list of that dates violations and printed documents to CSV format:

- Select a date from the 'Available Logs' panel on the left-hand side.
- Click on the 'Export' button.
- Choose a location to export to and give your file a name.
- Click on the 'Save' button.
- You see a dialogue telling you that the 'Export was successful'.
- Open the file from your chosen location.
- The CSV file contains details on the violations and printed documents from the selected date.

	A	B	C	D	E	F	G	H	I	J
1	*****									
2	Impero Violation Log Report									
3	*****									
4	Printed : 20/08/2014 09:09:49									
5	Date of log : 2014-08-19									
6	*****									
7	9 violations logged									
8	2 print outs logged									
9										
10	Image	Time	User	Computer	Violation	Reason	Notes	Severity	Status	Keyword
11		16:30:47	sjones	IT01-01	WindowCaption	New Tab - Google Chrome (From Policy: <ICT Suite Block List>)		Minor	Unclassified	*chrome*
12		16:30:40	sjones	IT01-01	Website	Accessed URL containing: *facebook* from Policy Group Blocks (From Policy: Group Blocks)		Minor	Unclassified	*facebook*
13		16:30:34	sjones	IT01-01	Website	Accessed URL containing: *youtube* from Policy Group Blocks (From Policy: Group Blocks)		Minor	Unclassified	*youtube*
14		16:30:34	sjones	IT01-01	Website	Accessed URL containing: *youtube* from Policy Group Blocks (From Policy: Group Blocks)		Minor	Unclassified	*youtube*
15		16:30:28	sjones	IT01-01	Application	*calc* (From Policy: <ICT Suite Block List>)		Minor	Unclassified	*calc*
16		12:55:05	sjones	IT01-01	WindowCaption	Twitter - Internet Explorer (From Policy: Group Blocks)		Minor	Unclassified	*twitter*
17		12:55:05	sjones	IT01-01	Website	Accessed HTTP containing: *twitter* from Policy Group Blocks (From Policy: Group Blocks)		Minor	Unclassified	*twitter*
18		12:54:49	sjones	IT01-01	Website	Accessed HTTP containing: *youtube* from Policy Group Blocks (From Policy: Group Blocks)	Changed status to: Resolved as false positive - Bill	Minor	Resolved as false positive	*youtube*
19		12:54:48	sjones	IT01-01	Website	Accessed HTTP containing: *youtube* from Policy Group Blocks (From Policy: Group Blocks)		Minor	Unclassified	*youtube*
20										
21										
22	Time	Computer	Username	Printer	Title	Pages	Copies			
23	09:17:14	IT01-01	sjones	Canon LBP5960	Report.txt - Notepad	1	1			
24	09:16:34	IT01-01	sjones	Canon LBP5960	Untitled - Notepad	1	1			

Image 73 - Violation/Printed Document Report

If you have selected a user or computer on the left-hand side, you are able to choose what information you wish to export:

- Select a user/computer from the 'Available Logs' panel on the left-hand side.
- Click on the 'Export' button.
- You then have the option of what information you wish to export (Image 73.1).

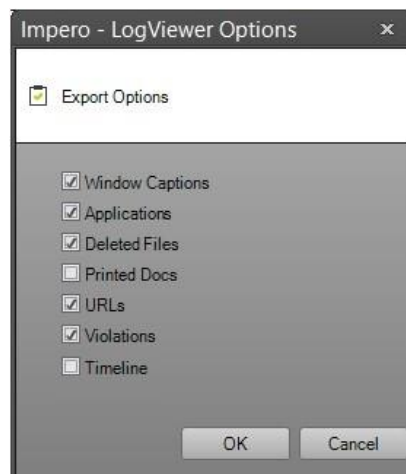


Image 73.1 - Export Options

- Ensure the criteria that you wish to export is selected here.
- Click on the 'OK' button.
- Choose a location to export to and give your file a name.
- Click on the 'Save' button.
- You see a dialogue telling you that the 'Export was successful'.
- Open the file from your chosen location.
- The CSV file contains detail on all the selected events from the selected user/computer (Image 73.2).
- Scroll further down the CSV file to view detailed information on each event type you chose to export.

	A	B	C	D	E	F
1	*****					
2	Impero Active Log Report					
3	*****					
4	Printed : 21/01/2014 09:52:23					
5	Date of log : 2014-01-17					
6	Computer : All					
7	Username : Bob					
8	*****					
9	104 windows logged					
10	56 websites logged					
11	46 applications logged					
12	0 printed docs logged					
13	0 deleted files logged					
14	23 violations logged					
15						

Image 73.2 - Log Viewer - Export

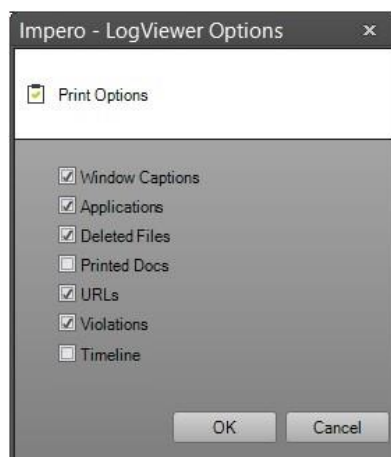
2.6.15.2 Print

Similar to the 'Export' function, the 'Print' feature varies depending on your selection in the 'Available Logs' panel on the left hand side of the Log Viewer window.

If you have selected a date on the left-hand side, you are able to print a list of any violations and printed documents to CSV format:

- Select a date from the 'Available Logs' panel on the left-hand side.
- Click on the 'Print' button.
- Choose a printer to print your report to and click on 'OK'.
- You then see a dialogue telling you that the 'Print was successfully sent to the printer'.
- The printed file displays details on all violations and printed documents from the selected date.

If you have selected a user or computer on the left-hand side, you are able to choose what information you wish to print:



- Select a user/computer from the 'Available Logs' panel on the left-hand side.
- Click on the 'Print' button.
- You then have the option of what information you wish to print (Image 74).
- Ensure the criteria that you wish to print is selected here.
- Click on the 'OK' button.
- Choose a printer to print your report to and click on 'OK'.

Image 74 - Export Options

- You then see a dialogue telling you that the 'Print was successfully sent to the printer'.
- The printed file contains details on all the selected events from the selected user/computer.

2.6.15.3 Report

The Log Viewer allows you to generate a variety of reports based on data captured by Impero.

- Click on the 'Report' button in the top-right corner of the Log Viewer window.
- You then see the 'Generate Report' window open on your screen (Image 75). - You can now set up the criteria that you wish to report on.

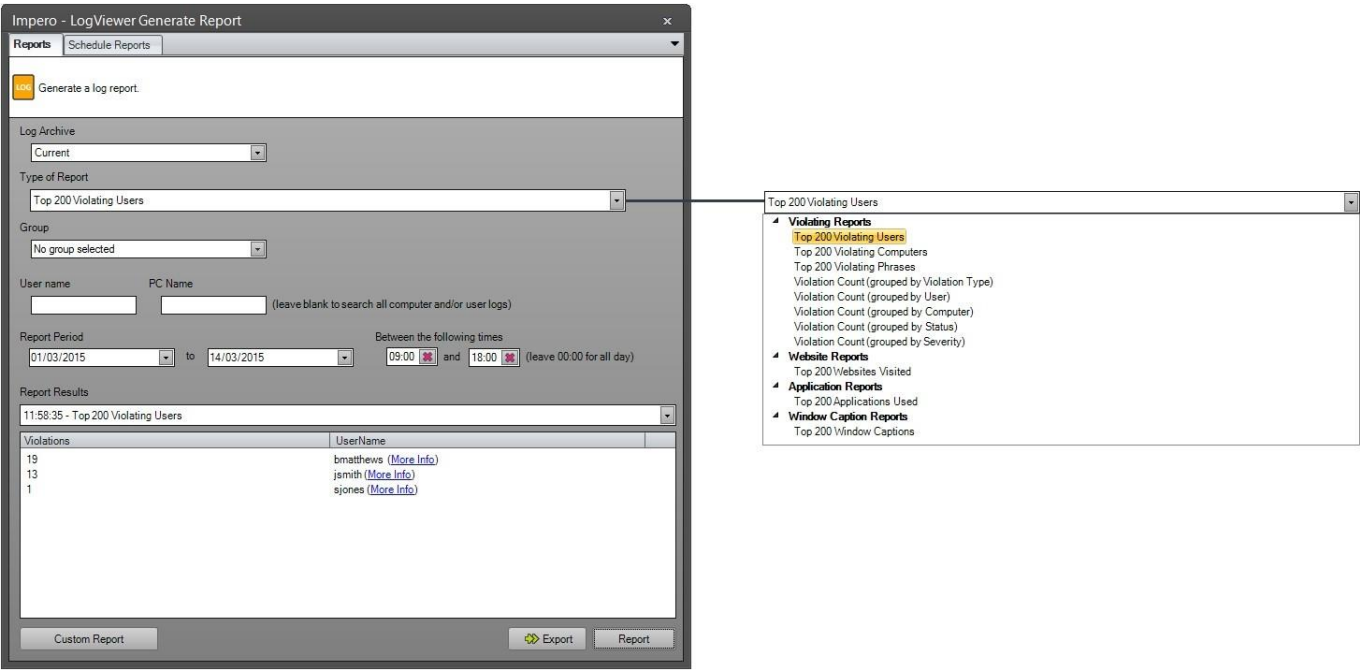


Image 75 - Log Viewer - Report

Log Archive

From this drop-down list you can select to report on any of the automatic monthly log archives that Impero keeps. If you leave the selection to 'Current', your report is based on all log data held by Impero.

Type of Report

This drop-down list contains a number of built-in reports that you can choose to run. Select a report from the list to view that report.

Group

You can choose to run your report based on members of any of your Impero groups by selecting the group from this dropdown list.

User name/PC Name

If you wish to report on a specific user or computer, type in the details of that user/computer into these fields. You can use an asterisk (*) to act as a wildcard in these fields. Alternatively, leave the fields blank to report on all users/computers.

Report Period

You can choose to report on a specific time period using the fields here. In the first two drop-down lists, select a beginning date and an end date to run your report between. You can also specify a time period to search on using the two fields labelled 'Between the following times', allowing you to, for example, run reports based on business hours. Leave the time fields set to '00:00' to run your report on the entire day.

- Once you have set your report criteria, click on the 'Report' button in the bottom right-hand corner of the window.

Report Results

Your report results, based on the criteria you have set, it displays in this panel at the bottom of the window. The drop-down field contains a list of all the reports you have run during this session; select from the list if you wish to view any previous result set. A number of the built-in reports display a 'More Info' link which you can select to view detailed information on the report results (Image 75.1).

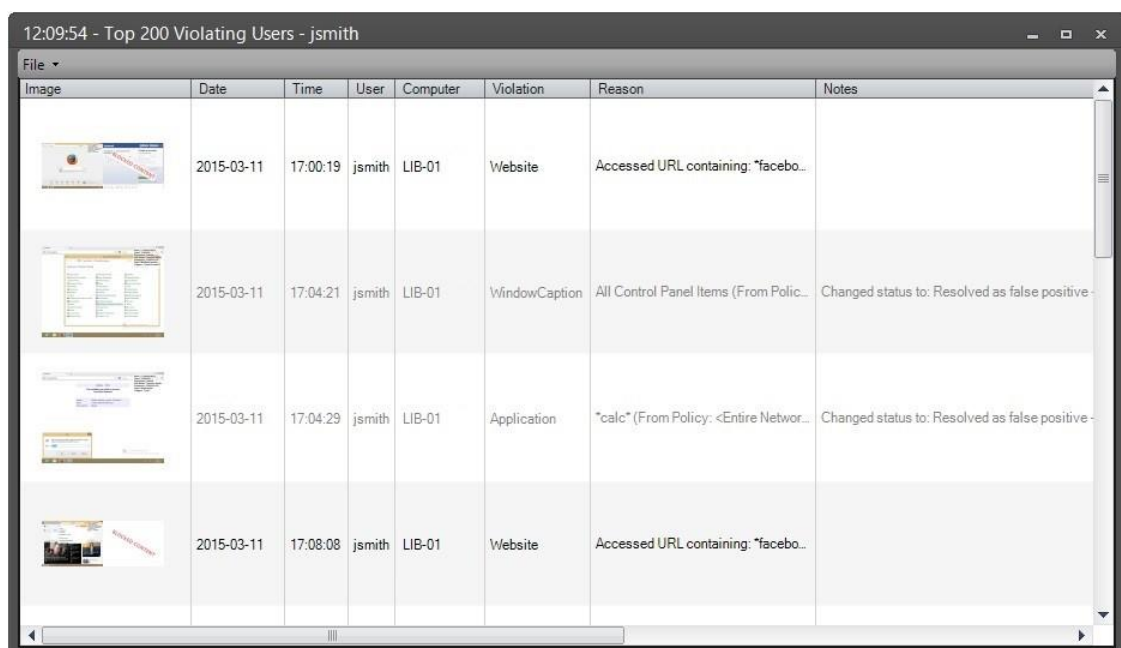






Image	Date	Time	User	Computer	Violation	Reason	Notes
	2015-03-11	17:00:19	jsmith	LIB-01	Website	Accessed URL containing: "facebo...	
	2015-03-11	17:04:21	jsmith	LIB-01	WindowCaption	All Control Panel Items (From Polic...	Changed status to: Resolved as false positive
	2015-03-11	17:04:29	jsmith	LIB-01	Application	"calc" (From Policy: <Entire Networ...	Changed status to: Resolved as false positive
	2015-03-11	17:08:08	jsmith	LIB-01	Website	Accessed URL containing: "facebo...	

Image 75.1 - More Info


There are two additional options at the bottom of this window. Export

- Click on the 'Export' button to save the latest 'Report Results' to CSV format.
- Choose a location to save your CSV file to.
- Give your file a name and click on 'Save'.

- The exported CSV file contains the details that were displayed in your last report result set.

2.6.15.3.1 Custom Report

The 'Custom Report' feature allows you to build and save your own custom report queries.

- At the bottom of the 'Generate Report' window (Image 76), click on the 'Custom Report' button.
- The 'SQL Builder' window is now open, with a list of different event types that Impero logs (Image 76).
- Click on the  icon next to an event type to view different column options.
- Tick the box next to each column option that you wish to return in your report. Once you selected the columns you wish to return, click on 'Next'.

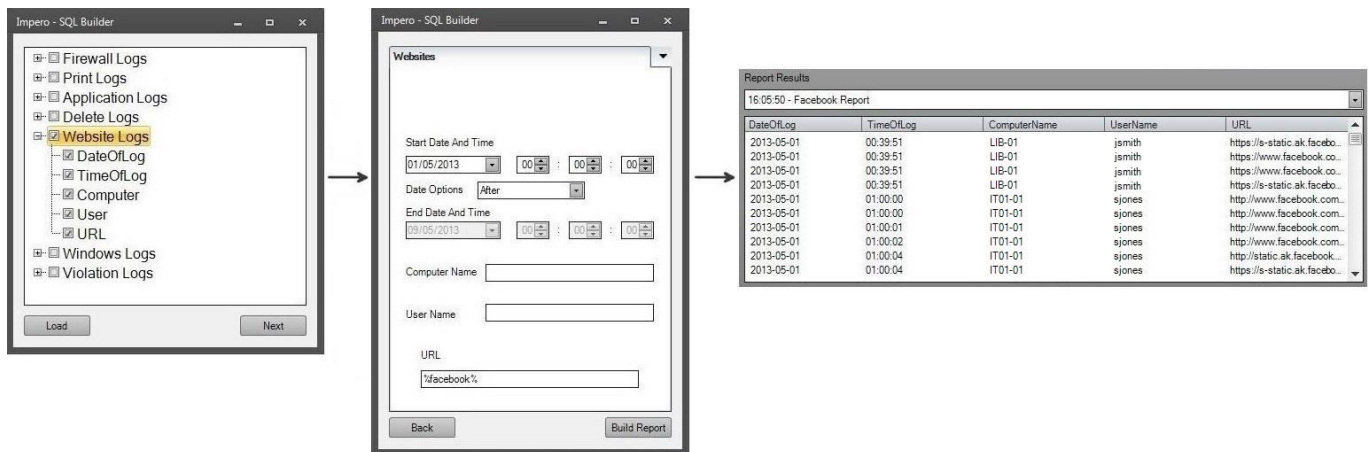


Image 76 – Log Viewer – Custom Reports

- In the next window, select the criteria that you wish to search upon.
- The criteria in this window reflects your selections in the first 'SQL Builder' window.
- The following example is based on selecting 'Website Logs' in the first 'SQL Builder' window.

Start Date And Time

Select a start date and time for your report. Your selection in the 'Date Options' field defines how this date and time is used.

Date Options

Choose how you wish to use the 'Start Date And Time' field:

All Dates – If you select this option, the report returns results based on all logs, regardless of selection in the 'Start Date And Time' field.

Same Day – If you select this option, the report returns results only from the date selected in the 'Start Date And Time' field.

Before – If you select this option, the report returns all results from before the date selected in the 'Start Date And Time' field.

After – If you select this option, the report returns all results from after the date selected in the 'Start Date And Time' field.

Until – If you select this option, the 'End Date And Time' field becomes active, allowing you to return results from between the 'End Date And Time' and the 'Start Date And Time'.

End Date And Time

If you have chosen 'Until' in the 'Date Options' field, enter an end date and time in this field. Your report returns results in between the 'Start Date And Time' and the 'End Date and Time'.

Computer Name

If you wish to return results from a specific computer, enter the computer name in this field. You can use the '%' symbol here to act as a wildcard.

User Name

If you wish to return results from a specific user, enter the user name in this field. You can use the '%' symbol here to act as a wildcard.

URL

If you wish to report on activity on a specific website, enter part of the URL in this field. You can use the '%' symbol here to act as a wildcard.

Note: The SQL Builder search uses the % symbol as the wildcard, rather than the * - this is because of SQL standards. It is only in the 'Custom Reports' feature that you should not use the asterisk (*) as a wildcard.

- Once you have set up the criteria you wish to report on, click on 'Build Report'. - Enter a name for your report and click on 'OK'.
- Choose whether you wish to save your report or not. If you save your report, you are able to re-load it in the 'SQL Builder' again at any time to re-run the report.
- Your results are then returned in the 'Report Results' field (Image 76).

2.6.15.3.2 Scheduled Reports

You can use the 'Scheduled Reports' feature to automatically run any built-in or custom report on a scheduled basis.

- From the 'Generate Report' window, select the 'Scheduled Reports' tab.

- In this tab, you have the option to set up your scheduled report (Image 77).

The screenshot shows the 'Impero - LogViewer Generate Report' window with the 'Schedule Reports' tab selected. The window contains a form for scheduling reports and a table of existing reports.

Form Fields:

- Report Name:** Text input field containing 'Web Report'.
- Type of Report:** Dropdown menu showing 'Top 200 Websites Visited'.
- Group:** Dropdown menu showing 'No group selected'.
- User Name:** Text input field.
- Pc Name:** Text input field.
- Between the following times:** Time selection fields showing '09:00' and '18:00' with a note '(leave 00:00 for all day)'.
- Run report every:** Spin box set to '1' and a dropdown menu set to 'Weeks'.
- Date to being scheduled report:** Date selection field showing '16/03/2015'.
- Buttons:** 'Add Custom Report' and 'Add Report' at the bottom left, and 'Remove Report' at the bottom right.

Table:

Report Name	Type of Report	Next Export Date
<input checked="" type="checkbox"/> Web Report	Top/websites	2015-03-16

Image 77 - Schedule Reports

Report Name

Enter the name of the report that you wish to run on a schedule.

Type of Report

You can choose to schedule any of the built-in reports from this list. If you want to schedule a custom report using the 'SQL Builder', press the 'Add Custom Report' at the bottom of the screen.

Group

You can choose to schedule a report based on members of any of your Impero groups by selecting the group from this dropdown list.

User Name/PC Name

You can schedule your report based on a specific user or computer by typing in details of the user/computer into these fields. You can use an asterisk (*) to act as a wildcard in these fields or leave the fields blank to report on all users/computers.

Between the following times

You can choose for your scheduled report to capture only data from between the times specified here.

- Once you have configured the criteria for your scheduled report, you can set up the scheduling:

Run report every

Select how often you wish to run this report. In the drop-down list, select either 'Days', 'Weeks' or 'Months' depending on how frequently you wish to run your schedule. Using the field to the left of the drop-down list, specify how often the report is repeated, i.e., 'every 5 days', 'every 2 weeks', 'every 1 month' etc.

Date to begin scheduled report

Specify the first date for your report. The report runs on the date you specify and then repeats from that day based on the frequency you have set.

- Once you have set up all the necessary criteria, click on the 'Add Report' button.
- This adds your report to the list of scheduled reports in the right-hand panel.
- You can then see when the scheduled report is due to run next.
- Your report exports to CSV format on the scheduled dates onto the Impero Server machine.
- The CSV file is saved to a folder called 'ScheduledReports' within the Impero Server directory (usually C:\Program Files (x86)\Impero Solutions Ltd\Impero Server\).

Note: If you do not know where this location is, or have any issues retrieving your reports, please contact your Network Administrator.

- If at any time you wish to stop running a scheduled report, mark the report using the tick-box in the 'Report Name' column, and click on the 'Remove Report' button.

2.6.15.4 Search

You can use the 'Search' function search through all the logs held by Impero, i.e., find all violations of a certain type, all events from one certain user, search for violations within a certain time/date range etc.

- Click on the 'Search' button from the Log Viewer window.
- This opens the 'LogViewer Search' window (Image 78).

- You can enter your 'Search Criteria' on the left-hand side of the window.

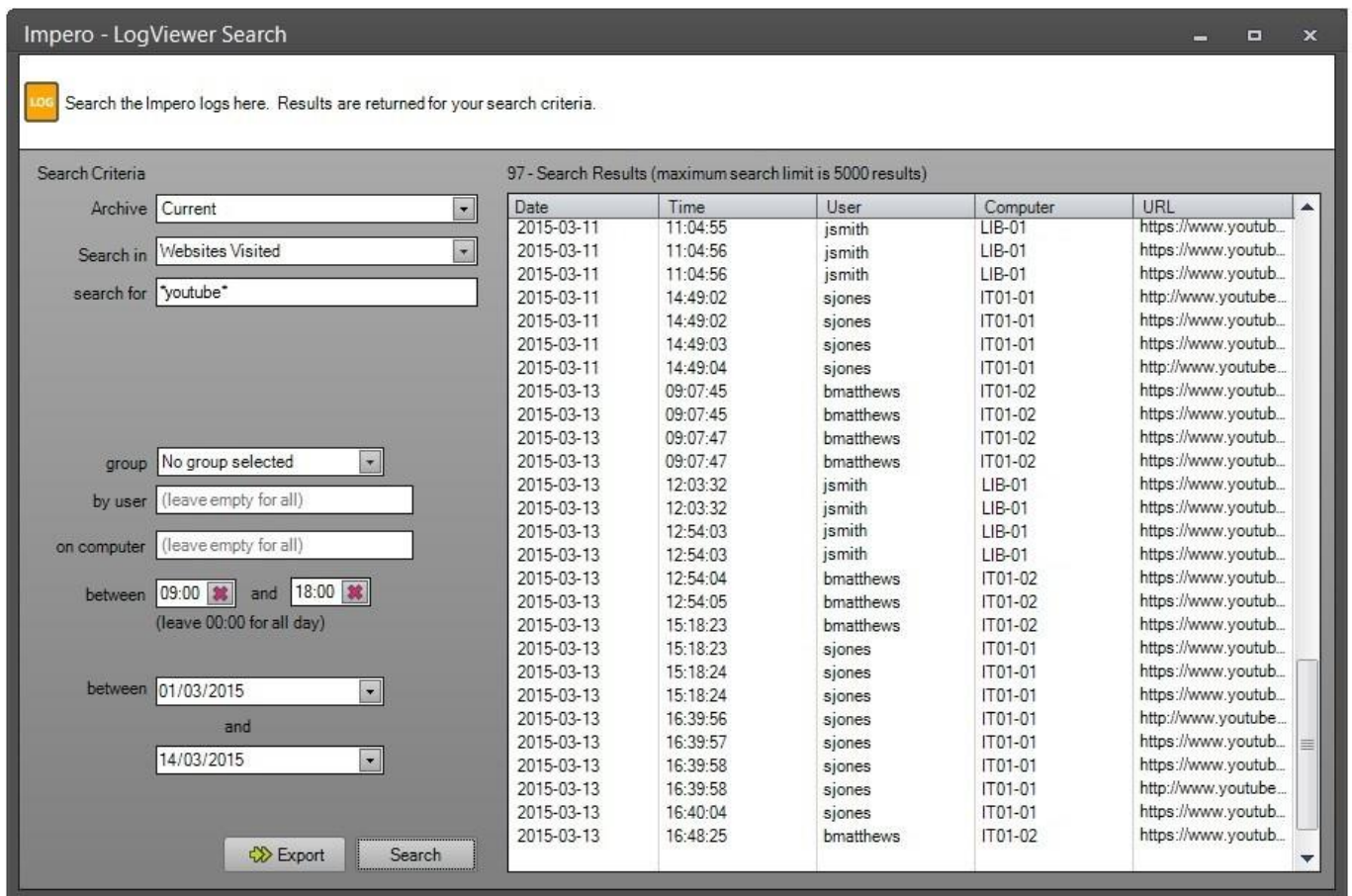


Image 78 - Log Viewer - Search

Archive

From this drop-down list you can select to search on any of the automatic monthly log archives that Impero keeps. If you leave the selection to 'Current', your search is on all logs help by Impero.

Search in

Select from the drop-down list which log type you wish to search on.

Search for

Enter your search term here based on your selection in the 'Search in' drop-down list. You can use an asterisk (*) to act as a wildcard.

Group

You can choose to perform your search on members of any of your Impero groups by selecting the group in this drop-down list.

By User

If you wish to search on a specific users log, tspecify the details of their username here. You can use an asterisk (*) to act as a wildcard.

On Computer

If you wish to search on activity from a specific computer, specify the details of the computer name here. You can use an asterisk (*) to act as a wildcard.

Between

You can choose to search on logs that were captured between specific times by entering the times into these fields.

Between

You can choose to search on logs that were captured between specific dates by entered the dates into these fields.

- Once you have set your search criteria, click on the 'Search' button.
- The result set loads in the right-hand panel.
- You can also click on the 'Export' button to export your result set to a CSV file.

3 Additional Console Features

There are a number of additional features available that helps in the day-to-day running, customising and support of the Impero Console.

3.1 Header Bar

The console header bar (Image 79) has a number of administrative tools that you can use to customise and manage your Impero Console.



Image 79 - Header Bar

There are five buttons along the header that perform different actions.

Impero Menu

The first of these buttons is the Impero logo in the top left-hand corner of the console window (Image 79.1):

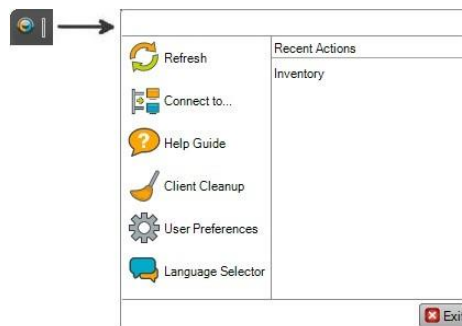


Image 79.1 - Impero Menu

Clicking on the Impero logo expands the menu to show additional buttons:



Refresh - Clicking on the 'Refresh' button refreshes the view of the Impero console.



Connect to... - If you select the 'Connect to...' button, you are prompted for an 'Impero Sever IP/Hostname' (Image 79.3). This gives you the option of connecting to a new Impero Server.



Image 79.3 - Connect To...



Help Guide - The 'Help Guide' button is a shortcut to the [Impero Knowledgebase](#). Clicking on this opens your default web browser to the Knowledgebase.



Client Cleanup - Selecting the 'Client Cleanup' option enables you to remove remote computers from the Impero computer list if they haven't been active for a set number of days. In the 'Impero - Client Cleanup' window (Image 79.4) select a date in the calendar and enter the Impero password to remove remote client machines that have not been active since that date.



Image 79.4 - Client Cleanup



User Preferences - The User Preferences window (Image 79.5) offers a variety of options that define how your Impero Console behaves:



Image 79.5 - User Preferences

Disable Alerts

Checking this option stops any Impero Console alerts from popping up while you are running the console.

Untick all users when changing group

If this is checked and you have a number of users selected in a User/Computer Group, when you change your view to a new group, those users are unselected.

Remote Control - Go to full screen on maximize

If you are viewing a remote computer and have this button checked, clicking on the maximize button on that window puts it into full screen mode.

Remote Control - Automatically take Control when switching to full screen

If this button is selected and you switch a remote computer to full screen mode, you automatically take control of the machine.

Add a custom colour tint to the Impero interface

This option allows you to personalise the look of your Impero Console.



Language Selector - Select the language in which you wish to view the Impero Console (Image 79.6).



Image 79.6 - Language Selector

Recent Actions - The 'Recent Actions' panel displays a history of the latest actions that have been carried out on your Impero Console.

The second button on the header bar (Image 79.7) allows you to customize the toolbar areas that you can see in the Impero Console:

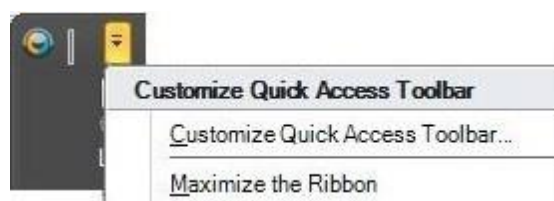


Image 79.7 - Header Menu

Customize Quick Access Toolbar

If you select 'Customize Quick Access Toolbar', this opens a new window (Image 79.8) which allows you to configure the 'Quick Access Toolbar'. This gives you a

drop-down list of all possible toolbar commands which you can then add to a list of 'Quick Access' items which then are displayed in the header bar. This is particularly useful for actions that you carry out frequently.

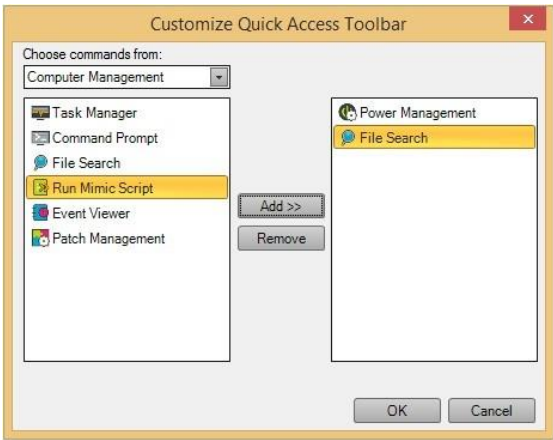


Image 79.8 - Customize Quick Access Toolbar

Find the action that you wish to add to the header bar from the drop-down list on the left-hand side. Once you have found the relevant action, click to select it in the left-hand panel, then click on the 'Add >>' button. This moves the action into the righthand panel, i.e., 'Power Management' and 'File Search' in Image 79.8. Finally, click on 'OK' to add it to your toolbar (Image 79.9):

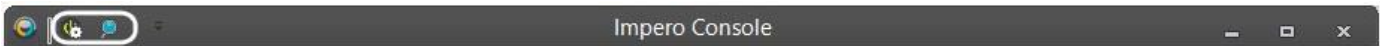


Image 79.9 - Quick Access Toolbar

The icons for 'Power Management' and 'File Search' are now added to the header bar, allowing you quick access to select these tools when necessary. Once added, you can then right-click your mouse on these icons which gives the additional option to 'Remove from Quick Access Toolbar' (Image 80).

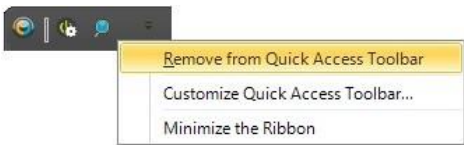


Image 80 - Remove

Maximize the Ribbon

If you select 'Maximize the Ribbon', it makes the toolbar 'sticky' so that it stays visible at all times (Image 80.1). You can also achieve this by double-clicking on any of the icons on the main toolbar.



Image 80.1 - Maximized Ribbon

Minimize/Maximize/Close

The final three options in the header bar allow you to minimize, maximize or close the Impero client (Image 80.2).



Image 80.2 - Header Bar

3.2 Footer Bar

The footer bar of the Impero Console (Image 81) displays information regarding the version of Impero you are running, as well as offering a number of support options.



Image 81 - Footer Bar

1 - The text in the bottom left-hand corner is simply a display to tell you how many computers are currently selected in whichever view you are currently displaying the Impero Console in. For example, if you have three remote computers selected in your Computer List, the display tells you that you have 3 computers ticked (Image 81.1).



Image 81.1 - Computers Ticked

2 - This display gives you various information regarding the version of Impero you are running. There are four pieces of information here:

v5.0.06 - This is the version number of the Impero Client that you are currently running.

Console Limit: 16 - This tells you the number of Impero Client Consoles that you are currently licensed to run concurrently.

Workstation Limit: 100 - This tells you the number of remote computers you are currently licensed to manage using Impero. License Expiry Date - This is the date on which your license with Impero expires.

Note: You can click on this text to load a license box. This is a quick way of finding your activation code which is required when contacting Impero Support.

3 - Clicking on the 'Help' button in the bottom right-hand corner of the Impero console expands into a menu item offering you various support options (Image 81.2).



Image 81.2 - Help Menu

Request Assistance

If you click on this option, you see a new dialogue box asking you to enter a short message (Image 81.3). Type the problem that you are having into this field and click on 'Submit'. This then alerts other Console users to the problem you are having (Image 81.4).

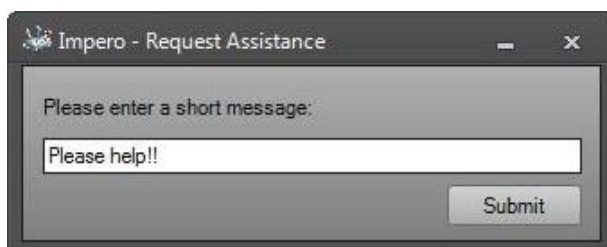


Image 81.3 - Request Assistance



Image 81.4 - Console Alert

Visit Impero Support Forum

Click on this option to visit the online Impero Support Forum. Your default browser opens to a login page, where you can enter your Impero account credentials to view the support forum.

Extended Information

The 'Extended Information' option opens a new window displaying detailed information about the Impero Client running on your machine (Image 81.5).

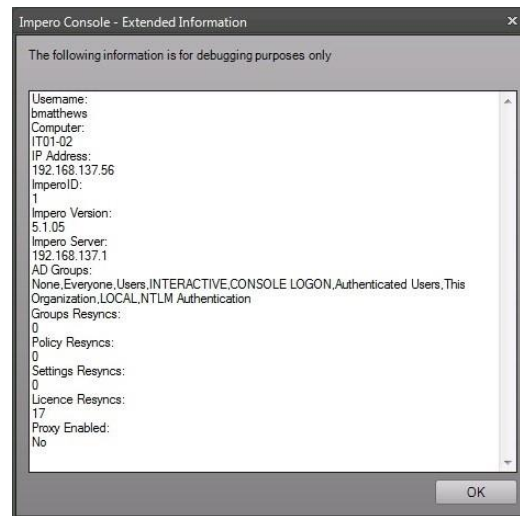


Image 81.5 - Extended Information

Enable/Disable Proxy Logging

This function is primarily used by Impero Support to diagnose any issues that may be occurring. It enables/disables logging of any traffic going through the Impero Proxy if it is enabled in your setup.

Enable/Disable Alerts Temporarily

Selecting this option toggles between whether console alerts are set to enabled (if your access rights allow you to receive alerts) or disabled for your user.

User Preferences

The User Preferences window (Image 81.6) offers a variety of options that define how your Impero Console behaves:

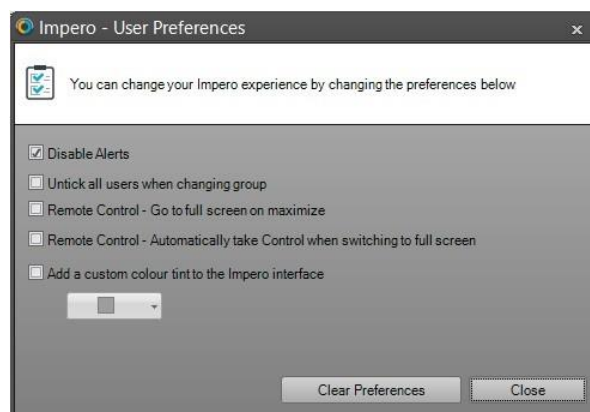


Image 81.6 - User Preferences

Disable Alerts

Checking this option stops any Impero Console alerts from popping up while you are running the console.

Untick all users when changing group

If this is checked and you have a number of users selected in a User/Computer Group, when you change your view to a new group, those users are unselected.

Remote Control - Go to full screen on maximize

If you are viewing a remote computer and have this button checked, clicking on the maximize button on that window puts it into full screen mode.

Remote Control - Automatically take Control when switching to full screen

If this button is selected and you switch a remote computer to full screen mode, you automatically takes control of the machine.

Add a custom colour tint to the Impero interface

This option allows you to personalise the look of your Impero Console by changing the colour of the interface.

3.3 Groups

When you first start using the Impero Console, there are a number of predefined default User Groups created. It is then necessary to create/modify new Computer/User Groups as required by your organisation (Image 82).

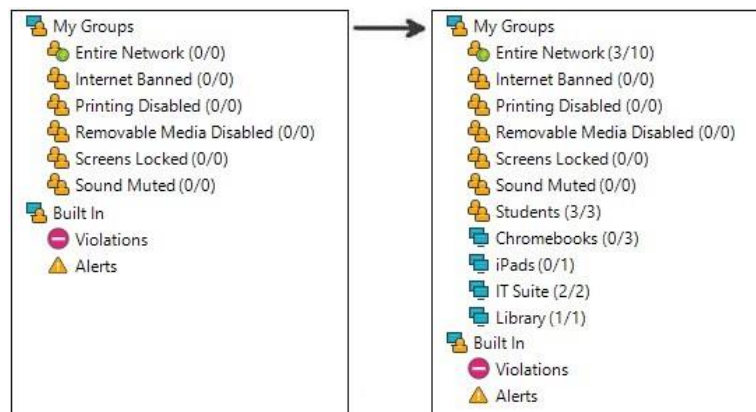



Image 82 - Default Groups/Created Groups

In order to create a new Group, click on the  icon that appears above the User/Computer Group List (Image 82.1).

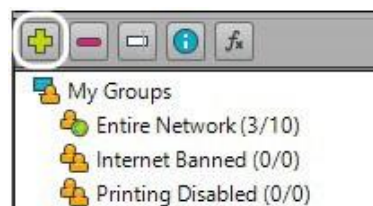


Image 82.1 - New Group Icon

This opens the 'Add Group' window which allows you to begin the creation of the necessary groups. There are a number of options within this window that govern how

your new group is created. These options are spread over three tabs. Group Details/Members

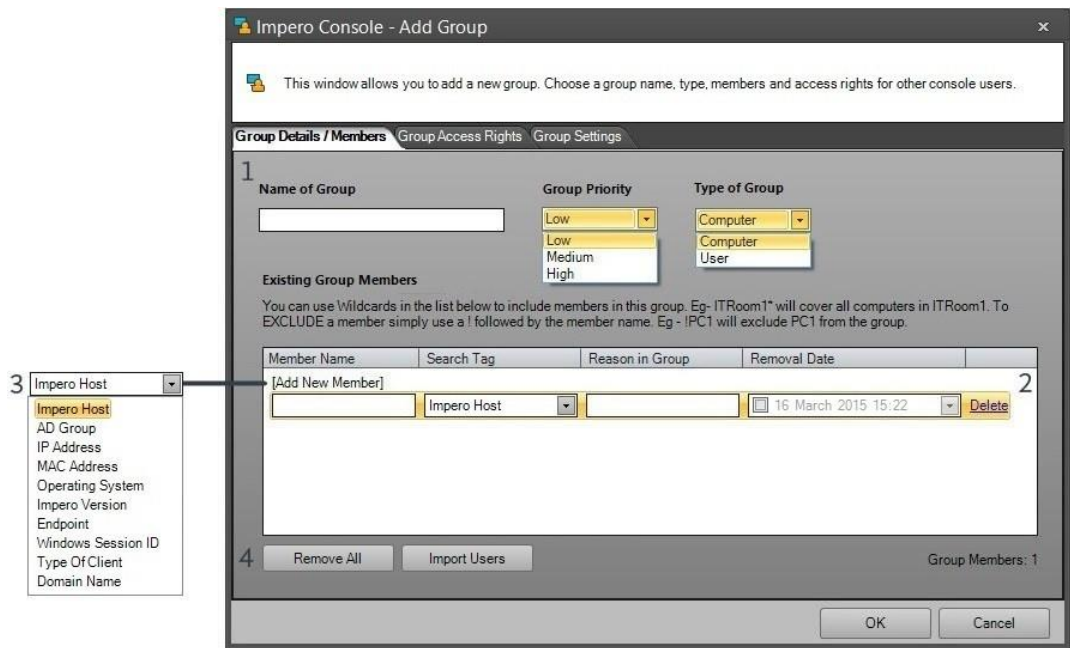


Image 82.2 - Add Group

1 - Group Properties



This section of the 'Add Group' window allows you to set basic properties of your new Group.

Name of Group

The name of the group is how it is then displayed in the Group List.

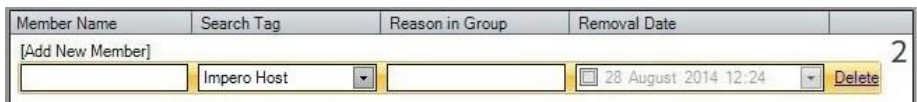
Group Priority

Give your group a priority from the options Low, Medium and High. Higher priority groups takes precedence over lower priority groups when applying group settings for users.

Type of Group

Select whether your group is a Computer Group or a User Group. For information on the differences between the two, please see the '[Users vs Computers](#)' section.

2- Existing Group Members



This panel of the 'Add Group' window enables you to add/modify/remove users from the group. In order to add a new member to the group, click on the '[Add New Member]' link which opens up the search fields underneath. There are then five fields available for you to edit:

Member Name

Type in the name of the member you wish to add to the group. You are also able to use a wildcard (*) to enter multiple users in one go, or if you do not know the full name of the member you wish to add. For example, 'ITRoom1*' covers all computers in ITRoom1, providing all the computer names begin with the string 'ITRoom1'. To exclude a member, simply use a '!' followed by the member name, i.e. '!PC1' excludes PC1 from the group.

Search Tag

Select from the options in this drop-down list which tag you wish to search upon to find new members for your group. See below [3] for details on how to use the Search Tag.

Reason in Group

If there is a specific reason that a member has been added to this group, enter it in the text field here.

Removal Date

If you wish to remove this user from the group on a specific date, check the box in this field and then enter the removal date from the calendar. You can also manually edit a specific time if you wish.

Delete

If you wish to remove a member from this group, do so by clicking on the 'Delete' button next to that user.

3 - Search Tag.



Select from the options in this drop-down list which tag you wish to search upon to find new members for your group.

Computer Name

Search based on the name that the computer Operating System reports back to Impero.

AD Group

This verifies to see what Active Directory (AD) groups are assigned to that computer and show in the new group if the AD group in 'Member Name' matches an assigned AD group.

IP Address

This verifies all the IP addresses of the computer (only valid for Computer Group type).

MAC Address

This verifies all the MAC addresses of the computer. This should be static and not change unless you change the physical hardware of the workstation (only valid for Computer Group type).

Operating System

This verifies the version of the Operating System being reported back to Impero (only valid for Computer Group type).

Impero Version

Filter membership of the group based on which version of the Impero Client is installed (only valid for Computer Group type).

Host Name

This filters based on host name of the session, for example: the host of the thin client server (only valid for Computer Group type).

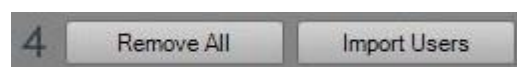
Windows Session ID

Search on the unique ID of the Windows session.

Type of Client

This takes two values: workstation or console. Workstation displays all workstations within your network, while console displays all users who currently have the console open.

4 - Additional Options



There are two additional option buttons at the bottom of this tab:

View Groups - These are security groups within your Active Directory and is dynamic with Impero. Any changes you make in Active Directory automatically changes in your Impero Group.

View Containers - These groups are Organizational Units and are static imports. Any changes you make within Active Directory is not reflected in Impero. You are required to manually update Impero to reflect the Active Directory changes.

Remove All

Remove all users from the currently selected group.

Import Users

You can import a text file containing a list of the users that you wish to import into your new group.

Group Access Rights

The second tab in the 'Add Group' window, 'Group Access Rights' (Image 82.4) allows you to configure the access privileges that Impero Console users have to the group that you are creating.

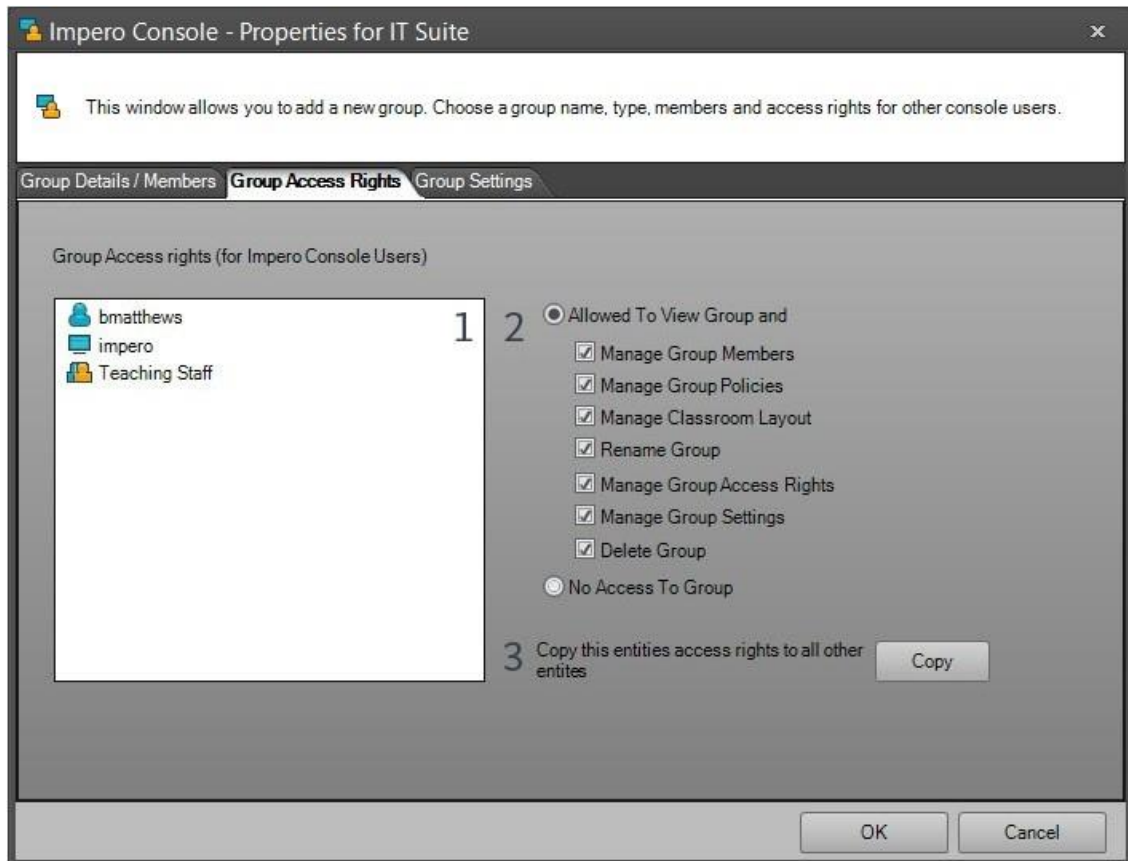


Image 82.4 - Group Access Rights

1 - Group Access rights (for Impero Console Users).

This displays a list of the users that have been granted Console access via the Impero Server. Select the user that you wish to modify the access rights for by clicking on them. In Image 82.4, user 'Admin' is selected.

2 - Access Privileges

This is a list of the access levels that you can assign to each user. Mark the relevant checkbox next to the access level that you wish to grant the selected user.

Allowed To View Group and

The console user has access to view the group, as well as perform any further selected options.

Manage Group Members

The console user has the ability to add/remove users to this group.

Manage Group Policies

The console user is able to add/modify/remove any policies (Block List/Allow List/Keyword Detection/Advanced Policies) applied to the group.

Manage Classroom Layout

The console user is able to modify the Room Layout of the group (Computer Groups only).

Rename Group

The console user has access to change the name of the group.

Manage Group Access Rights

The console user is able to make changes to Group Access Rights (this window) for this group.

Manage Group Settings

The console user can make changes to the Group Settings (the third tab in 'Add Group').

Delete Group

The console user is allowed to delete this group.

No Access To Group

The console user does not have any access rights to the group.

3 - Copy

Clicking on the 'Copy' button copies the access rights of the selected console user to the rest of the console users in the list. For example, if user 'Becky' has access to only 'Rename Group' and 'Delete Group', you can select 'Becky', click the on 'Copy' button, and then the rest of the console users then have access to the same two options.

Group Settings

The 'Group Settings' tab (Image 82.5) allows you to apply a range of functions to the group you are creating.

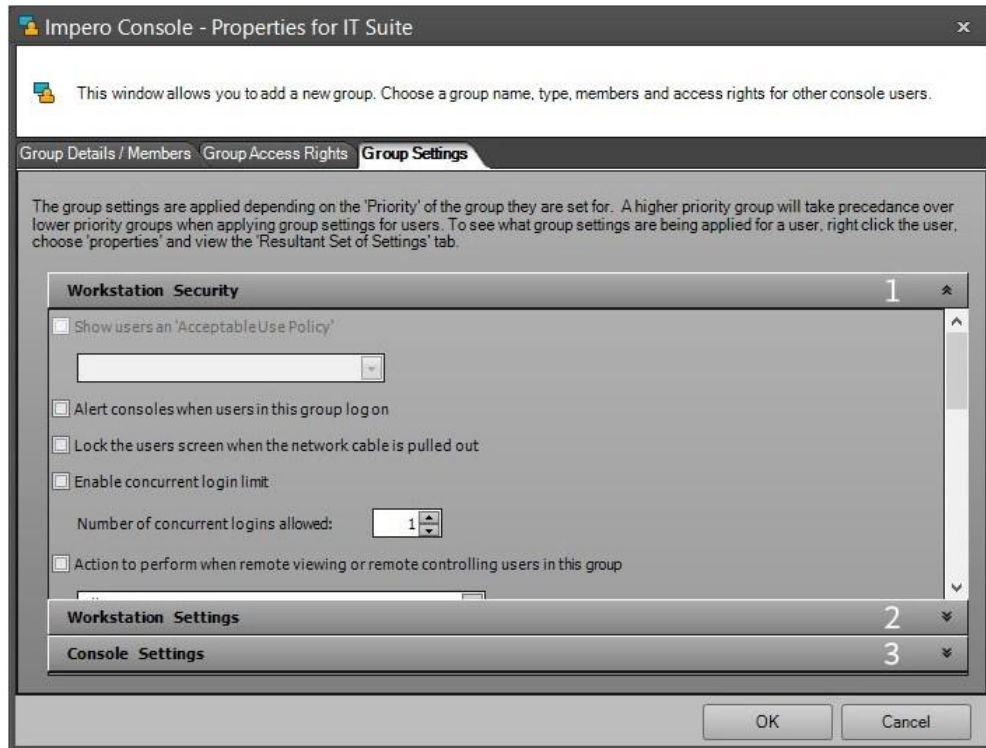


Image 82.5 - Group Settings

1 - Workstation Security

Show users an 'Acceptable Use Policy'

You have the option to show users an 'Acceptable Use Policy' either the first time they log in, or each time they log in. You can set up different AUPs for different groups of users.

Note: The Acceptable Use Policies are set up in the Impero Server.

Alert consoles when users in this group logon

This alerts any console users that a user within this group has logged onto the system.

Lock the users screen when the network cable is pulled out

If network cable is removed from the remote computer, the screen is locked.

Enable concurrent login limit

Set the number of concurrent logon sessions that one username can have active at any one time within this group.

Action to perform when remote viewing or remote controlling users in this group

If this is set then you can choose what happens when the user is being remote controlled.

Allow - Allow remote controlling of these users.

Deny - Do not allow remote controlling of these users. If this option is selected, the Thumbnail View for this group displays only a black window with the text 'Access Denied'.

Ask if Allowed (Auto ALLOW after 10 seconds) - Ask the remote user's permission to take control. Control is automatically allowed after 10 seconds if no response is given.

Ask if Allowed (Auto DENY after 10 seconds) - Ask the remote user's permission to take control. Control is automatically denied after 10 seconds if no response is given. If this option is selected, the Thumbnail View for this group displays only a black window with the text 'Access Denied'.

Force a log off when user is idle for more than

This option allows Impero to log the current user off when a machine has been idle for a specified number of minutes.

Force a shutdown when user is idle for more than

This option allows Impero to shut the machine down when a machine has been idle for a specified number of minutes.

Action to perform when users raise 'Minor'/'Moderate'/'Severe' violations

You can perform an action after a violation is triggered a specified number of times at each of the different levels. The actions you can set are to have the screen locked, the Internet disabled, log the user off or to move the user to a specific group, all for a specified amount of time. Once the time has expired, they are automatically removed from that group.

2 - Workstation Settings

Alert consoles when HD space < 200MB

This displays an alert within the Impero console for stations with less than 200MB of space.

Hide 'Request Assistance' links

This disables the request assistance links.

Hide 'Open Impero Console' menu item

This disables the 'Open Impero Console' item on the system tray icon menu.

Hide Impero Workstation tasktray icon

This disables the Impero system tray icon.

Disable Workstation

This causes Impero client to disable. However, users can still open the Impero Console.

Hide Desktop Shortcut

This disables the 'Impero Console' desktop shortcut.

Use browser extensions for web filtering (disable the internal Impero Proxy)

This option enables the use of extensions for all web browsers (i.e., Internet Explorer, Google Chrome, Mozilla Firefox, Safari and Opera) - meaning that all web browsers are affected by Impero web filters/logs. Untick this option if you wish to enable the internal Impero Proxy for web filtering.

Disable pCredit (Printer Credit System)

This disables the Impero Printer Credit System.

Add Date, Time, Username and Computer name to each printed page

If the Impero Printer Credit System is enabled, this adds date, time, user, and computer name information to the bottom of each page that is printed.

Show floating information form

This opens the Impero floating information form which contains a link to request help as well as icons to show which group blocks are currently applied to the user (Image 82.6).

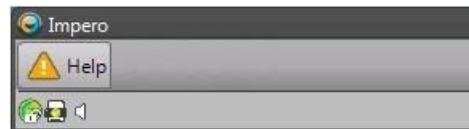


Image 82.6 - Floating Information Form

Enable YouID Seamless Sign-In (Requires YouID browser extension)

If you are a YouID user, select this option in order to allow seamless sign-in to YouID; YouID then picks up AD login details from Impero Education Pro, and therefore when you navigate to your organisation's YouID login page, you are automatically signed in. In order for this feature to work, you are required to have your YouID details entered into the Impero Server.

3 - Console Settings

Allow Impero Console users to bypass group policies for Low or Medium Groups

If you tick this box, users with access to the Impero Console ignores low and medium group policies.

Do not show battery level warnings

Stop Impero alerting you to a low battery on a client machine.

Hide layered windows when remote controlling

Enabling this option allows you to see hidden window layers in some programs when remote controlling a computer. For example, some Microsoft applications have hidden layers that you would not see on regular remote control session. However, with this option enabled these layers are always visible, or you can also set it on a per session basis by clicking on 'Capture Transparency' in the 'Settings' menu.

The group settings are applied depending on the 'Priority' of the group they are set for. A higher priority group takes precedence over lower priority groups when applying group settings for users. To see what group settings are being applied for a user, right click on the user, choose 'Properties', and view the ['Resultant Set of Settings'](#) tab.

3.3.1 Personal Groups

As well as the Computer and User groups that are set up in Impero, there is also the option to give users access to 'Personal Groups'. This allows Console users to create their own group, independent of all other groups - with their own policies and filters that does not affect other users on the network. All settings applied to the group are disabled once the Console is closed down. Access to Personal Groups are assigned to users via the Impero Server. This can be useful if you have 'Bring your own Device' (BYOD) initiatives in place.

There are three levels of access that a user can have; 'No Access to My Personal Group', 'Full Access to My Personal Group' and 'Full Access to EVERY My Personal Group'.

Personal Groups can also be populated using 'Registry Keys'.

No Access to 'My Personal Group'

Console users with this setting applied do not have access to create any Personal Groups. They only see the Computer and User groups that they have been given access to.

Full Access to 'My Personal Group'

If your user has this setting applied, you can set up your own Personal Group. You see an additional section for Personal Groups in the left-hand panel of the Impero Console (Image 83).

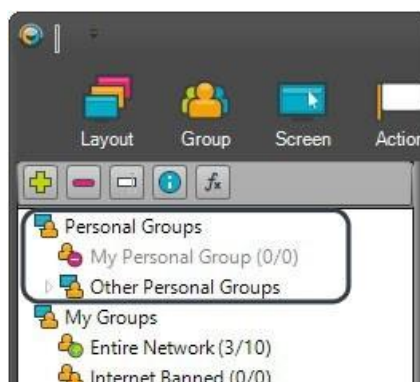


Image 83 - Personal Groups

In order to set up the Personal Group, right-click on 'My Personal Group' and hover over the 'Actions' menu item (Image 83.1).

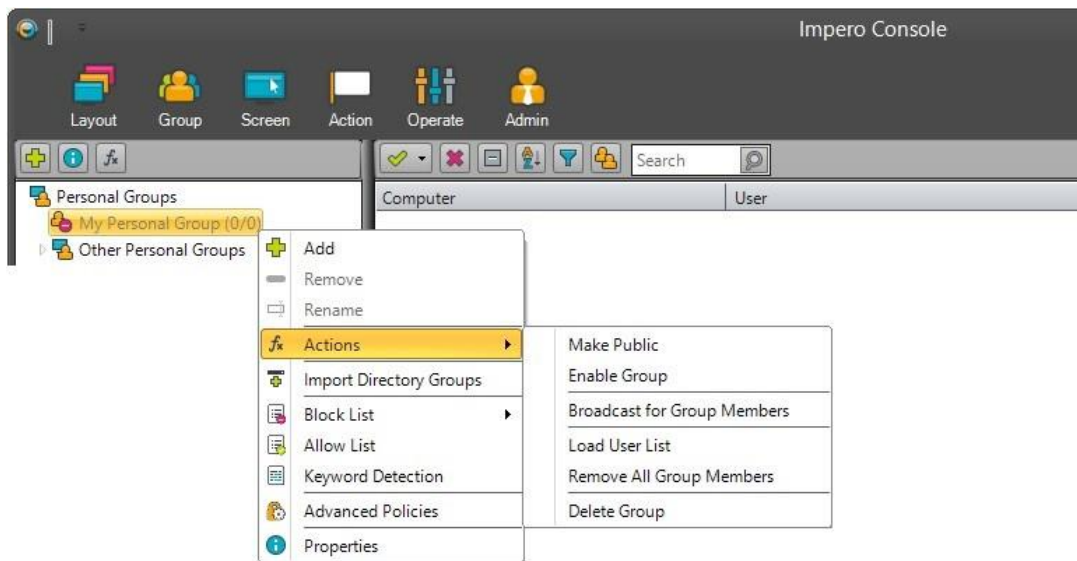


Image 83.1 - Actions

There are a number of options available from the 'Actions' menu:

Make Public

If you make your Personal Group public, users across the network can then join your group. Users can right-click on the Impero logo in their system task tray, select 'Personal Groups' and then click on 'Join Group'. They are then provided with a list of Personal Groups that are made public (Image 83.2).

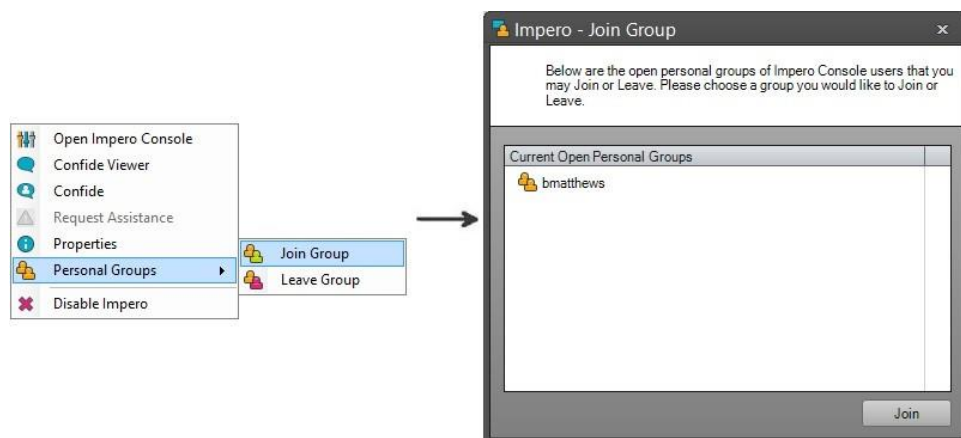


Image 83.2 - Join Group

The 'Join Group' window contains a list of usernames of those Console users that have made their Personal Group public.

The user can select a name and click on 'Join' which adds them to that Console users Personal Group.

If you have made your Personal Group public, the option in the 'Actions' menu changes to 'Make Private' (Image 83.3).

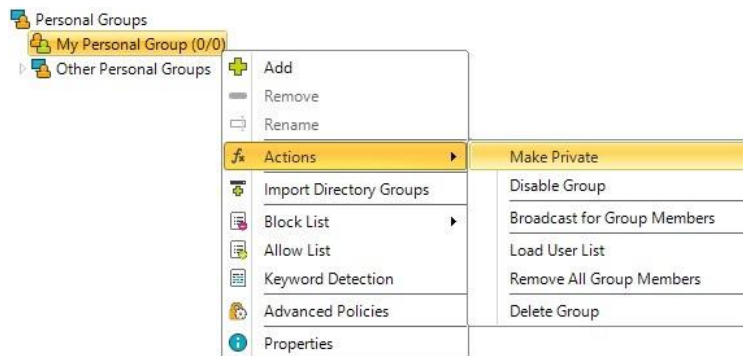


Image 83.3 - Make Private

Select this option if you no longer wish for users to join your group.

Disable Group

Select 'Disable Group' if you no longer wish for your group to be active. When disabled, none of the policies applied to your group takes effect. When your group is disabled, this menu item changes to 'Enable Group' which you can select in order to activate your policies again.

Broadcast for Group Members

Select this option if you wish to invite users to join your Personal Group. Clicking on 'Broadcast for Group Members' opens a new window on your screen containing a list of all the groups that currently exist in your Impero system (Image 83.4).



Image 83.4 - Broadcast for Group Members

Select from this list the group of users that you want to invite to join your group and click on 'Ask Users to Join'. Users within the selected group then see a message on their screen inviting them to join your Personal Group (Image 83.5).



Image 83.5 - Join Group

The user can then click on 'Accept' which joins them to your Personal Group, or 'Deny' to reject the request.

Load User List

You have the option to load a list of users into your Personal Group. In order to do so, you must have a text file containing a list of the usernames of the users that you wish to add to your group, with one username on each line. It is necessary that this text file is then placed in a specific location that is defined within the Impero Server. In order to have this text file put in place, please contact your Network Administrator.

Once your list of users is in place, select the 'Load User List' option from the 'Action' menu item. This then opens a new window on your screen containing a list of all the text files that are in the folder that is specified in the Impero Server (Image 83.6).

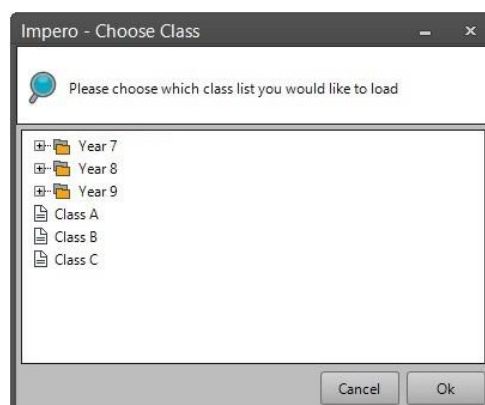


Image 83.6 - Load User List

Select the list of users that you want to put into your group and click on 'Ok'. The users that are contained within the selected text file is then automatically joined to your Personal Group.

Remove All Group Members

Select this option if you wish to remove all of the users that currently belong to your Personal Group.

Delete Group

Select this option to delete your Personal Group. It is automatically recreated when you restart your Impero Console.




Full Access to EVERY 'My Personal Group'

If your user has this setting applied, you can set up your own Personal Group, as well as see all other Personal Groups (Image 83.7).



Image 83.7 - Every Personal Group

Under the 'Other Personal Groups' heading, you can see all the other users that have access to Personal Groups. There are different icons that display for each group depending on how that Personal Group is currently set up:

-  This icon means that the Personal Group is currently disabled.
-  This icon means that the Personal Group is currently enabled and set to private.
-  This icon means that the Personal Group is currently enabled and set to public.

You are able to right-click on any other Personal Group that you can see and perform any of the actions that appear in the 'Actions' sub-menu (Image 83.8).



Image 83.8 - Actions

These options perform the same actions as those that are available when working on your own Personal Group.

Registry Keys

There are three registry keys that can be configured to populate Personal Groups with:

```
HKEY_CURRENT_USER\Volatile
Environment\Impero_PopulateMyPersonalGroupWithComputersLike
HKEY_CURRENT_USER\Volatile
Environment\Impero_PopulateMyPersonalGroupWithComputers
HKEY_CURRENT_USER\Volatile
Environment\Impero_PopulateMyPersonalGroupWithUsers
```

These keys require to be configured as 'String Values' (REG_SZ) (Image 83.9).

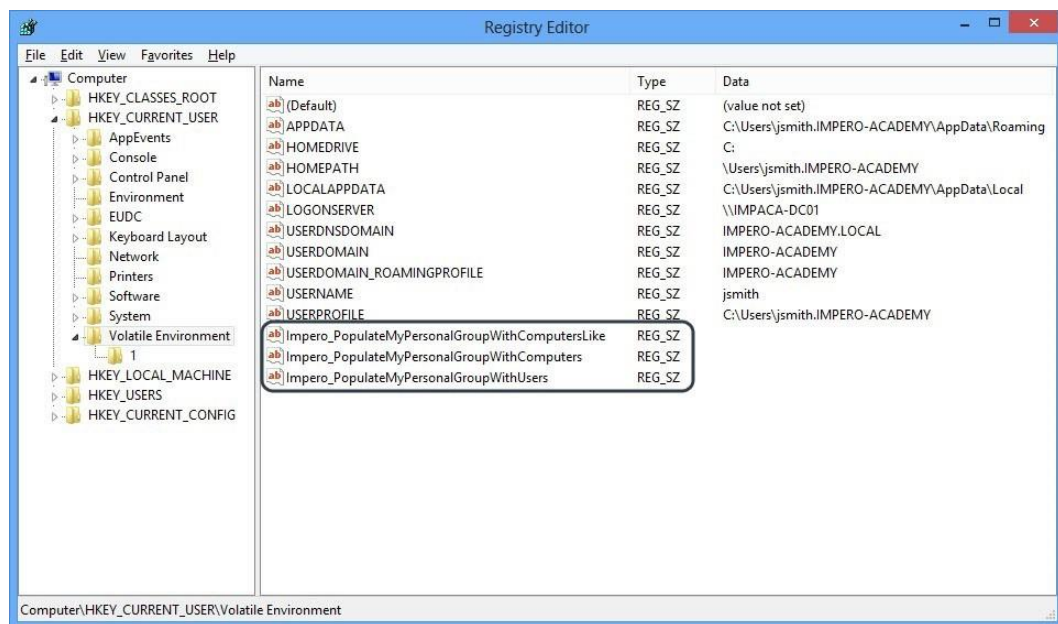


Image 83.9 - Personal Groups Registry Keys

Note: Please only use this method if you are comfortable editing system registry settings. If you are not comfortable with this, please verify with your Network Administrator.

The use of these registry keys overrides any of the previous methods of populating your Personal Group. For example, if you have one of these entries in place, and then broadcast for users to join your Personal Group, any users that attempt to join your Personal Group does not appear in your group unless they are part of the registry key setting that you have in place.

Impero verifies for these registry keys in the order displayed above and only uses the first registry key that is populated.

Therefore, if you populate the

'Impero_PopulateMyPersonalGroupWithComputersLike' key, the other two are ignored even if they have an entry.

Impero_PopulateMyPersonalGroupWithComputersLike

This registry key instructs Impero to look through every computer that has the Impero Client installed on it and is connected to your Impero network, and then add

the computers that match the value that you set. Those computers that match your value is then added to your Personal Group. You can use an asterisk (*) as a wildcard.

For example, if the following computers have the Impero Client installed to them, and are connected to your Impero network:

ICT-ROOM1-01	ICT-ROOM2-01
ICT-ROOM1-02	ICT-ROOM2-02
ICT-ROOM1-03	ICT-ROOM2-03

And you set the 'Impero_PopulateMyPersonalGroupWithComputersLike' registry key to 'ICT-ROOM1*', the following computers are added to your Personal Group:

```
ICT-ROOM1-01
ICT-ROOM1-02
ICT-ROOM1-03
```

But the computers beginning with 'ICT-ROOM2' are not added to the Personal Group.

`Impero_PopulateMyPersonalGroupWithComputers`

This registry key instructs Impero to add the computer(s) you specify into your Personal Group. You can add multiple computers separated by a comma, and the use of asterisks as a wildcard are also supported in this method.

For example, the following computers have the Impero Client installed to them, and are connected to your Impero network:

ICT-ROOM1-01	ICT-ROOM2-01
ICT-ROOM1-02	ICT-ROOM2-02
ICT-ROOM1-03	ICT-ROOM2-03

And you set the 'Impero_PopulateMyPersonalGroupWithComputers' registry key to 'ICT-ROOM1-01,ICT-ROOM1-02', the following computers are added to your Personal Group:

```
ICT-ROOM1-01
ICT-ROOM1-02
```

But all the other computers are not added.

`Impero_PopulateMyPersonalGroupWithUsers`

This registry key instructs Impero to add the users or Active Directory groups that you specify into your Personal Group. You can add multiple users/Active Directory

groups separated with a comma. All entries are assumed to be usernames; if you wish to specify an Active Directory group, the entry is required to be contained by [square brackets].

For example, if you set the 'Impero_PopulateMyPersonalGroupWithUsers' registry key to 'Steve,Jessica,[Admins]', the following users are added to your Personal Group:

- Steve
- Jessica
- All members of the 'Admins' Active Directory group.

Note: If using the comma separated method of setting your registry key, please ensure there are no spaces in between entries.

3.4 User Properties

When you are viewing Users/Computers in any of the available views, you can right-click on any user/computer to see a list of actions that you are able to perform. The majority of these are shortcuts to the toolbar actions in previous sections of this guide. However, it also provides the additional option of viewing User Properties (Image 84).

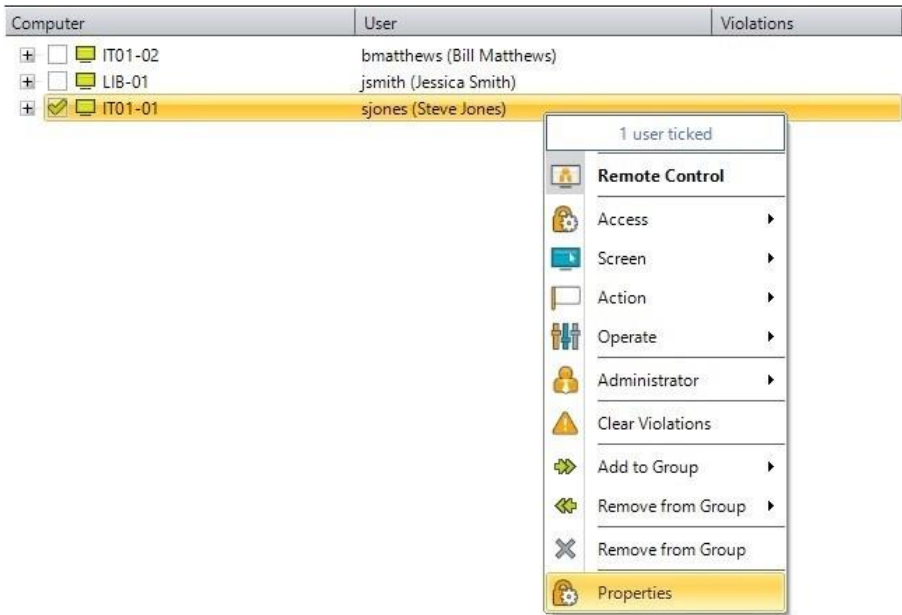


Image 84 - Properties

In the example of Image 84, the user 'Becky' is selected. Right-click on the user and select 'Properties' at the bottom of the pop-up menu. This opens a new window (Image 84.1) with two tabs displaying information on the selected user. The default tab opens up to 'Basic Properties'.

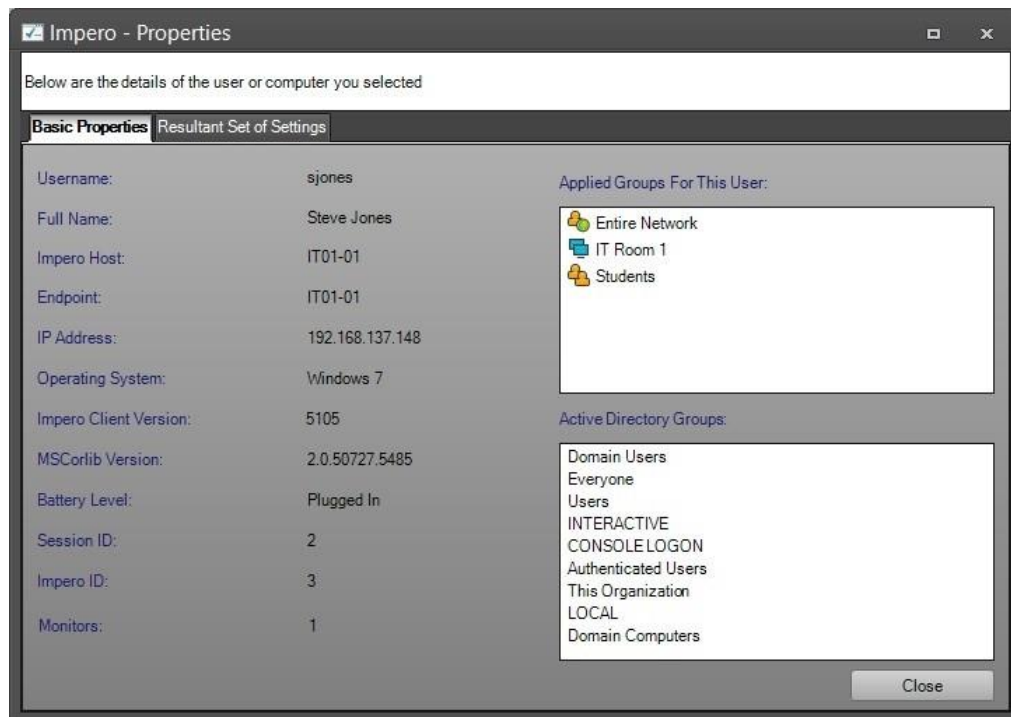
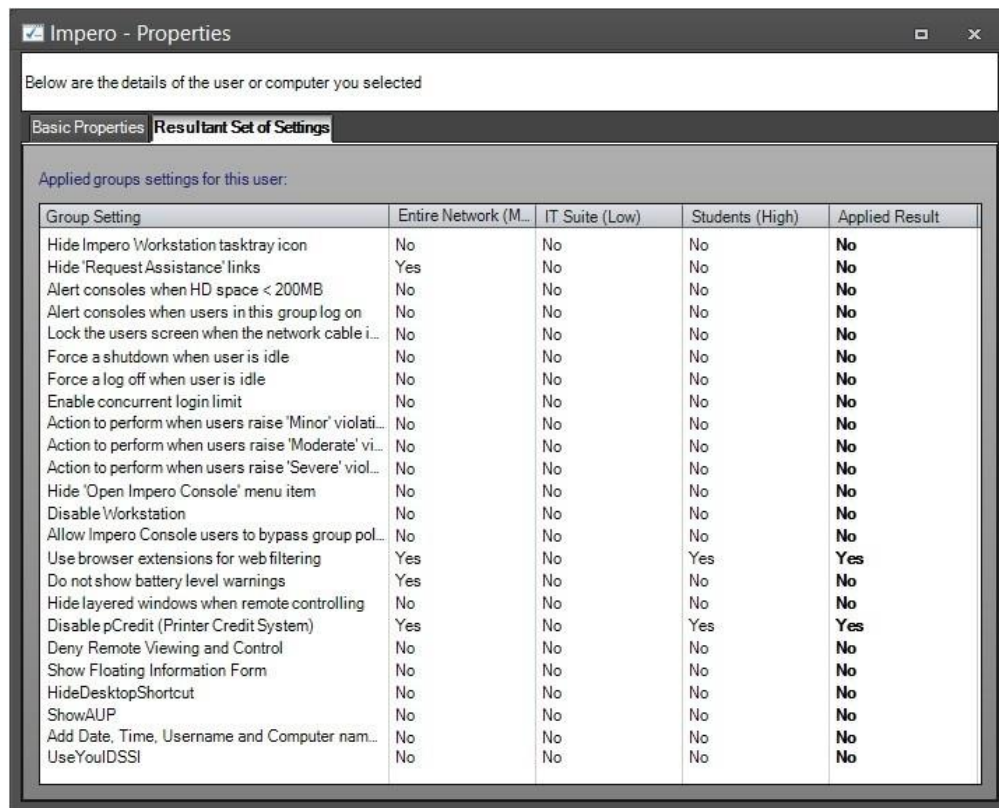


Image 84.1 - Basic Properties

The 'Basic Properties' window shows details on the user/computer that was selected, such as properties of the machine that the user is logged into, Impero Groups that the user belongs to, and Active Directory Groups that the user belongs to.

The second tab in this window shows the 'Resultant Set of Settings' which shows all of the group settings applied to a user based on the groups that they belong to, and the resulting setting based on the priorities of those groups (Image 84.2).



Impero - Properties

Below are the details of the user or computer you selected

Basic Properties **Resultant Set of Settings**

Applied groups settings for this user:

Group Setting	Entire Network (M...	IT Suite (Low)	Students (High)	Applied Result
Hide Impero Workstation tasktray icon	No	No	No	No
Hide 'Request Assistance' links	Yes	No	No	No
Alert consoles when HD space < 200MB	No	No	No	No
Alert consoles when users in this group log on	No	No	No	No
Lock the users screen when the network cable i...	No	No	No	No
Force a shutdown when user is idle	No	No	No	No
Force a log off when user is idle	No	No	No	No
Enable concurrent login limit	No	No	No	No
Action to perform when users raise 'Minor' violati...	No	No	No	No
Action to perform when users raise 'Moderate' vi...	No	No	No	No
Action to perform when users raise 'Severe' viol...	No	No	No	No
Hide 'Open Impero Console' menu item	No	No	No	No
Disable Workstation	No	No	No	No
Allow Impero Console users to bypass group pol...	No	No	No	No
Use browser extensions for web filtering	Yes	No	Yes	Yes
Do not show battery level warnings	Yes	No	No	No
Hide layered windows when remote controlling	No	No	No	No
Disable pCredit (Printer Credit System)	Yes	No	Yes	Yes
Deny Remote Viewing and Control	No	No	No	No
Show Floating Information Form	No	No	No	No
HideDesktopShortcut	No	No	No	No
ShowAUP	No	No	No	No
Add Date, Time, Username and Computer nam...	No	No	No	No
UseYouDSSI	No	No	No	No

Image 84.2 - Resultant Set of Settings

In the example of Image 84.2, user 'Becky' belongs to six groups of varying priority level - Entire Network (Medium), Ad (Low), Demo Network (Low), Internet Banned (Medium), Lab 1 (Low) and Lab 3 (High). The display shows each 'Group Setting' and the policy applied to each Group Setting in each Group. The final column, 'Applied Result', shows what setting is applied to each Group Setting for the selected user based on the group priorities, i.e. all the 'Applied Results' are set to 'No' because all of the Group Settings in 'Lab 3' are set to 'No', which is the group with the highest priority.

3.5 Browser Extensions

The Impero web browser extensions enable you to filter and log Internet activity from Internet Explorer, Google Chrome, Mozilla Firefox, Safari and Opera browsers.

In order to enable the use of browser extensions, first go through the following steps:

- Right-click on an Impero group from the left-hand side of your Console window- Select 'Properties'.
- Select the 'Group Settings' tab from the top of this window.
- Click on the 'Workstation Settings' button.

- Ensure the 'Use browser extensions for web filtering (disable the internal Impero Proxy)' option is ticked.

Please note that this change must be made on the highest priority group that your users belong to in order to take effect.

If the 'Use browser extensions for web filtering' option is unticked, the internal Impero Proxy is enabled, which results in all web browsers being filtered and logged; however, any HTTPS traffic bypasses Impero blocks and logs.

Once the option to use browser extensions is enabled, you are able to download the extension relevant to the web browser you wish to use.

3.5.1 Internet Explorer

The extension for Internet Explorer comes in the form of an add-on named 'ImperoV3BHO.BHO', which is automatically installed when the Impero Client is installed to a machine. This is supported on 32-bit versions of Internet Explorer only.

To verify that the add-on is installed and enabled, click on the 'Settings' icon on your Internet Explorer browser, and select 'Manage add-ons'. In the new window you should see 'ImperoV3BHO.BHO' (Image 85).

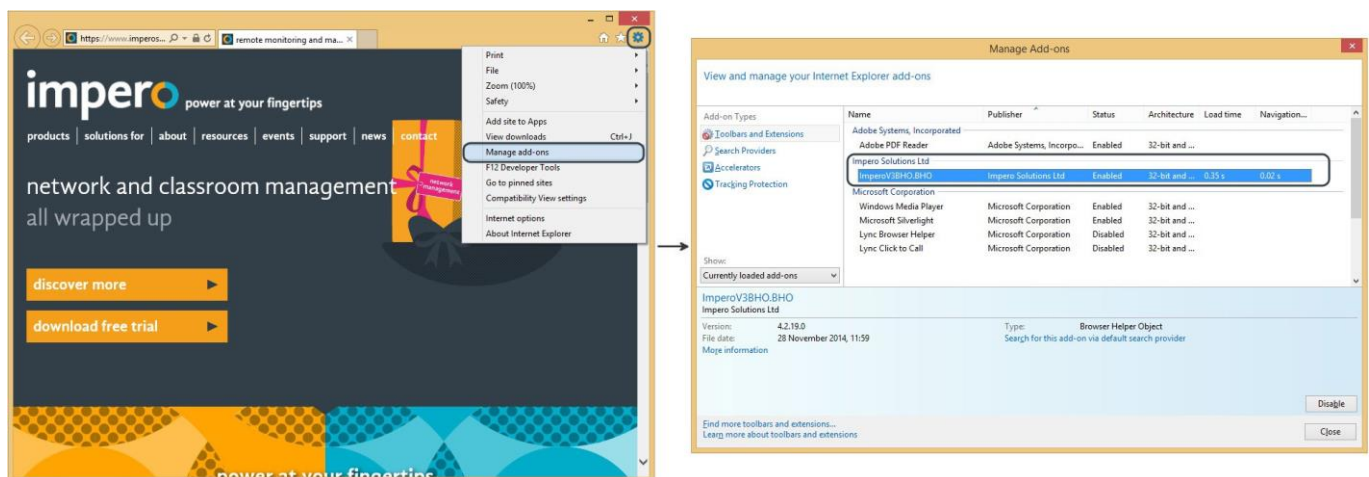


Image 85 - Internet Explorer Add-On

In order to prevent users from manually disabling the add-on, you can use the [Block List](#) to create a window block for the 'Manage Add-ons' window. This stops users from accessing this window to disable ImperoV3BHO.BHO.

Alternatively, you can use Group Policy to ensure that the ImperoV3BHO.BHO is enabled for all users, as well as preventing users from manually disabling the add-on. Within a Group Policy Object (GPO), for either 'Computer Configuration' or 'User Configuration', browse to the following options:

Administrative Templates > Windows Components > Internet Explorer > Internet Control Panel > Advanced Page > Allow third-party browser extensions ENABLE this policy

Administrative Templates > Windows Components > Internet Explorer > Disable add-on performance notifications
ENABLE this policy

Administrative Templates > Windows Components > Internet Explorer > Automatically enable newly installed add-ons
ENABLE this policy

Administrative Templates > Windows Components > Internet Explorer > Do not allow users to enable or disable add-ons
ENABLE this policy

User Configuration > Administrative Templates > Start Menu and Taskbar > Do not allow pinning programs to the Taskbar
ENABLE this policy

Administrative Templates > Windows Components > Internet Explorer > Turn off Managing SmartScreen Filter for Internet Explorer 9
ENABLE this policy and in the options choose to turn the filter OFF

Administrative Templates > Windows Components > Internet Explorer > Turn off Managing SmartScreen Filter for Internet Explorer 8
ENABLE this policy and in the options choose to turn the filter OFF

Administrative Templates > Windows Components > Internet Explorer > Internet Control Panel > Advanced Page > Turn on Enhanced Protected Mode
DISABLE this policy

Administrative Templates > Windows Components > Internet Explorer > Internet Explorer > Security Features > Add On Management > Add On List
Enabled\Add On list
Value Name {220A4F50-B00B-485B-8CB3-E8C9032CFAE9} Value 1

Additional policy for IE11 and above:

Administrative Templates > Windows Components > Internet Explorer > Internet Control Panel > Advanced Page > Turn on 64-bit tab processes when running in Enhanced Protected Mode on 64-bit versions of Windows
DISABLE this policy.

Windows 2012 R2:

Administrative Templates > Windows Components > Internet Explorer > Turn off Performance Notifications
ENABLE this policy

3.5.2 Google Chrome

The Impero Education Pro extension for Google Chrome is available for download for free from the [Chrome Web Store](#) (Image 86). Once installed and enabled, all activity on the Google Chrome web browser is logged and filtered by Impero.

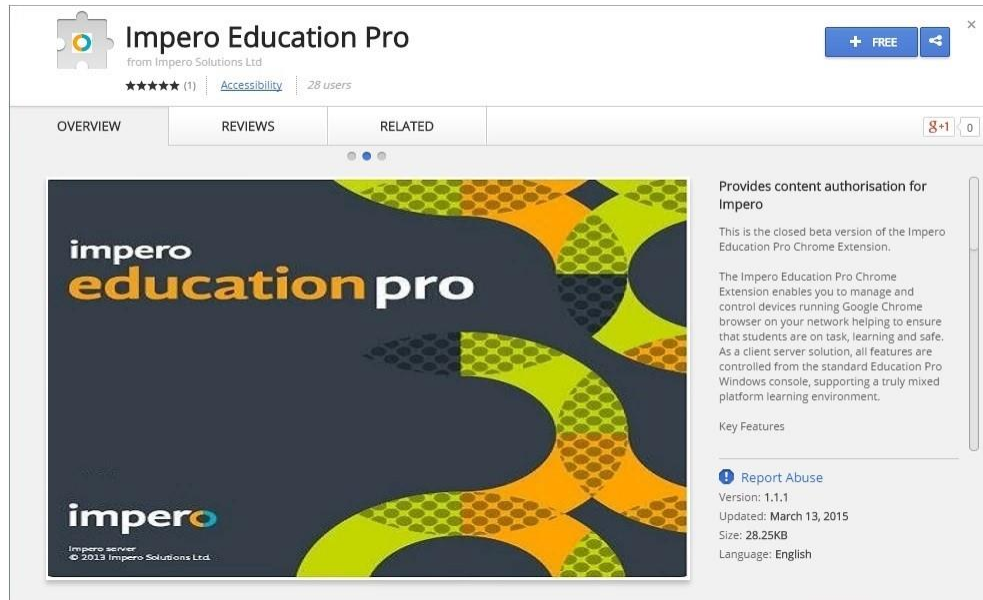


Image 86 - Chrome Web Store

Click on the 'FREE' button in order to begin the download, and then click on 'Add' when the confirmation dialogue box appears (Image 86.1).



Image 86.1 - Confirm Chrome Extension

Once installed, navigate your Chrome web browser to `chrome://extensions` to verify that the extension has been installed and enabled (Image 86.2).

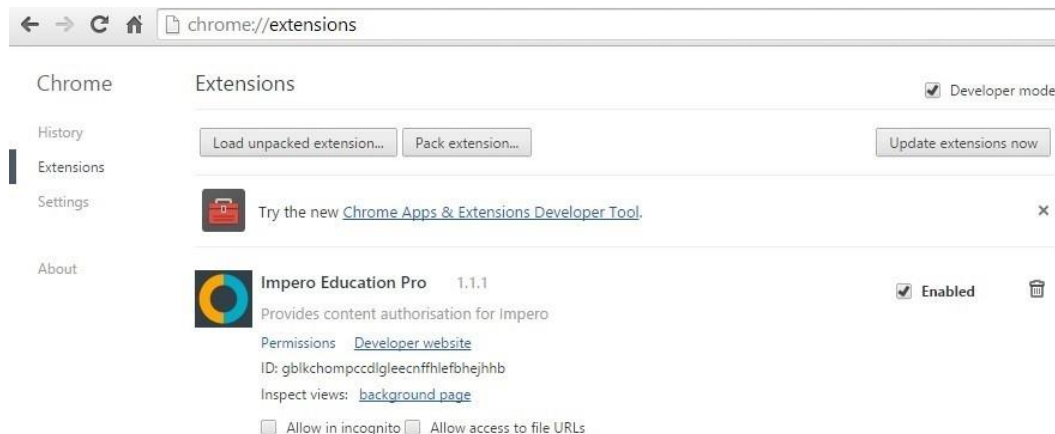


Image 86.2 - Google Chrome Extension

In order to prevent users from manually disabling the extension, you can use the '[Block List](#)' to create a window block for the 'Extensions' window. This stops users from accessing this window to disable the Impero Education Pro extension.

Alternatively, you can use Group Policy to ensure that the Impero Education Pro extension is enabled for all users, as well as preventing users from manually disabling the add-on. In order to do so, carry out the following steps:

- Download the [Google Administrative Templates](#).
- Open your Group Policy Manager.
- Create the GPO to install the Chrome extension.
- Right-click on your GPO and select 'Edit'.
- From the new window, expand either the 'Computer Configuration' or 'User Configuration' depending on your desired setup- Right-click on 'Administrative Templates', and select 'Add/Remove Templates' - Click on 'Add'.
- Browse to and open the 'chrome.adm' template relevant to your Operating System and language - Once uploaded, expand to the following path:

Policies > Administrative Templates > Classic Administrative Templates > Google > Google Chrome > Extensions

- On the right-hand side, select 'Configure the list of force-installed extensions' - Right-click and select 'Edit'.
- Select the 'Enabled' option.
- Click on 'Show'.
- Under the 'Value' column, enter the following string:

`gblkchompccdlgleecnffhlefjbhejhbb;https://clients2.google.com/service/update2/crx`

- Click on 'OK', followed by 'Apply'.

- You may also wish to disable the 'Incognito mode' option from Google Chrome- In the same GPO, expand from the left hand side the following path:

Policies > Classic Administrative Templates > Google Chrome

- Now, on the right-hand side, locate 'Incognito mode availability'
- Right-click on this item, and click on 'Edit'
- In the new window, select the option to 'Enable' this object
- From the 'Incognito mode availability' drop-down list, select 'Incognito mode disabled.' - Click on 'OK', followed by 'Apply'
- Assign this GPO to your desired computers/users in the usual manner
- Affected users then see the Chrome extension force installed and enabled (Image 86.3)



Image 86.3 - Google Chrome Extension GPO

3.5.3 Mozilla Firefox

The Impero Education Pro extension for Mozilla Firefox is available to download for free from the [Firefox Add-Ons store](#). Click on the 'Add to Firefox' button to install the add-on.

Please note that the Firefox extension is not compatible with installations of Mozilla Firefox on Apple Mac Operating Systems.

To verify that the add-on has been successfully installed and enabled, click on the contextual menu in the top right corner of your Firefox browser, and select 'Add-ons'. In the new tab that now opens, select 'Extensions' on the left-hand side, and ensure that the Impero Education Pro add-on is present and enabled (Image 87).

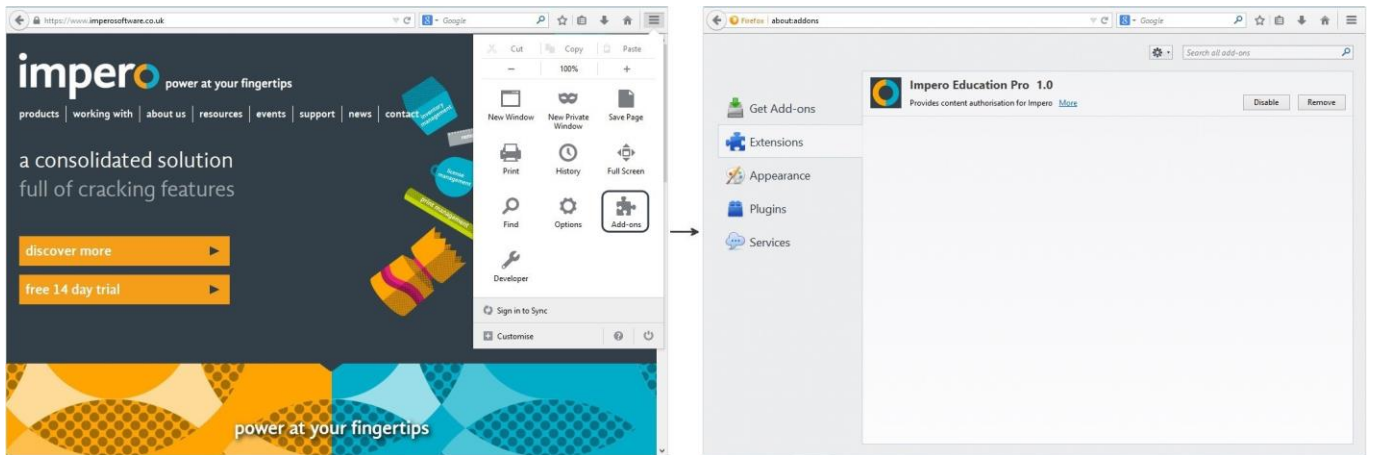


Image 87 - Firefox Add-ons

In order to prevent users from manually disabling the extension, you can use the '[Block List](#)' to create a window block for the 'Addons Manager' window. This stops users from accessing this window to disable the Impero Education Pro extension.

3.5.4 Safari

The Impero Education Pro extension for Safari can be downloaded directly from the [Impero website](#). This immediately downloads the file 'impero_safari_extension.safariextz'. Once the download is completed, locate the file in your 'Downloads' area and double-click. This prompts you to install the Impero Education Pro extension (Image 88).



Image 88 - Safari Extension Install

Click on the 'Install' button to install the Impero Education Pro extension for Safari.

To verify that the extension has been installed and enabled, click on the 'Safari' menu, and select 'Preferences'.



Image 88.1 - Safari Extension

On the new window, click on 'Extensions' to verify that the Impero Education Pro extension has successfully installed and been enabled (Image 88.2).



Image 88.2 - Safari Extension

In order to prevent users from manually disabling the extension, you can use the '[Block List](#)' to create a window block for the 'Extensions' window. This stops users from accessing this window to disable the Impero Education Pro extension.

3.5.5 Opera

The Impero Education Pro extension for Opera is available for download for free from the [Opera add-ons webpage](#). Click on the 'Add to Opera' button in order to install the extension.

To verify that the extension is installed and enabled, click on the 'Opera' menu in the top left-hand corner of the browser window, and select 'Extensions' (Image 89).

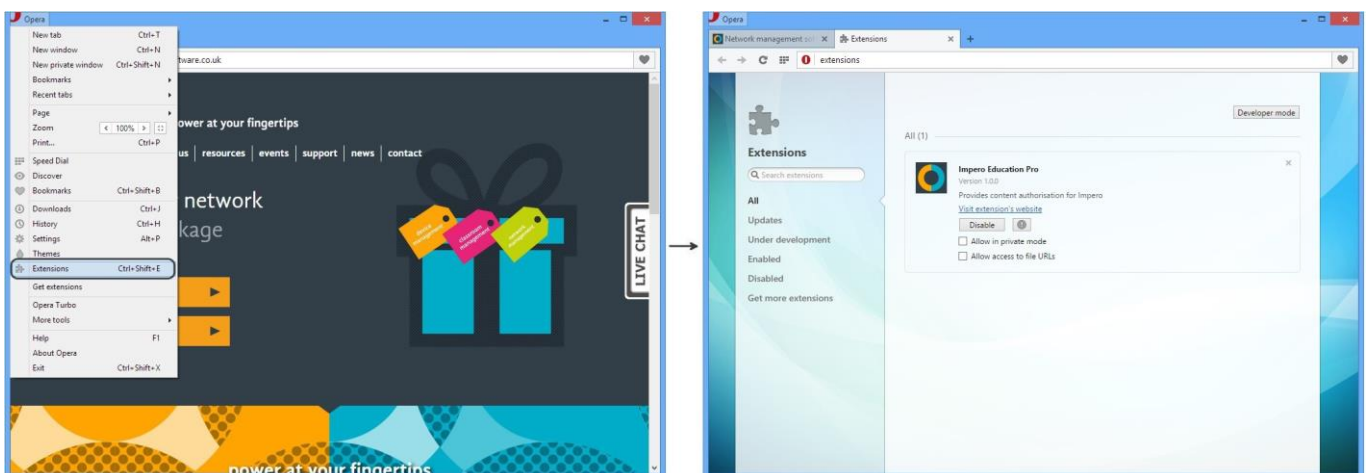


Image 89 - Opera Extension

In order to prevent users from manually disabling the extension, you can use the '[Block List](#)' to create a window block for the 'Extensions' window. This stops users from accessing this window to disable the Impero Education Pro extension.

4 Teacher Tips

This section describes how to use the ten most common tasks for teachers.

4.1 Restricting Individual Users

Impero is able to perform various actions on users, for example: restrict use of their computer, banning Internet, disabling printing, muting sound, and disabling USB storage devices on any computer they try to use.

Example: Banning Internet for select users.

1. [Select](#) the users.
2. Drag and drop one of these users onto the group 'Internet Banned'.
3. A dialogue box appears (Image 90) asking for how long the internet should be banned for: 'Until Removed' (Forever), 'For a limited time' (Pre-set time intervals), 'Until the following time' (choose date and time).

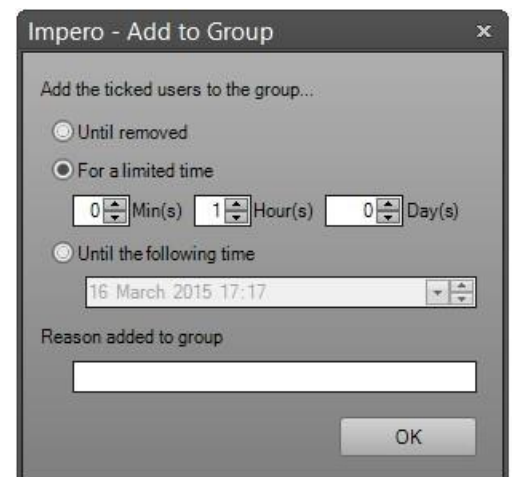
Note: You can modify the default selection in this dialogue box through the Impero Server.

4. Internet is banned for these users on all computers until they are manually removed or the time has expired.

Restore user Internet:

Option 1: [Select](#) the users and then right mouse click on top of a selected user and select 'Remove from Group', then 'Internet banned'.

Option 2: Click on 'Internet Banned' group and [select](#) the users you wish to remove; then right mouse click on one of them and select 'Remove from Group'.



Option 3: If the user is not currently logged on but you would like to remove the ban, then right-click on 'Internet Banned' Group and select 'Properties'. This opens the Group Properties window (Image 90.1). Locate the username and click on the delete button on the right-hand side.

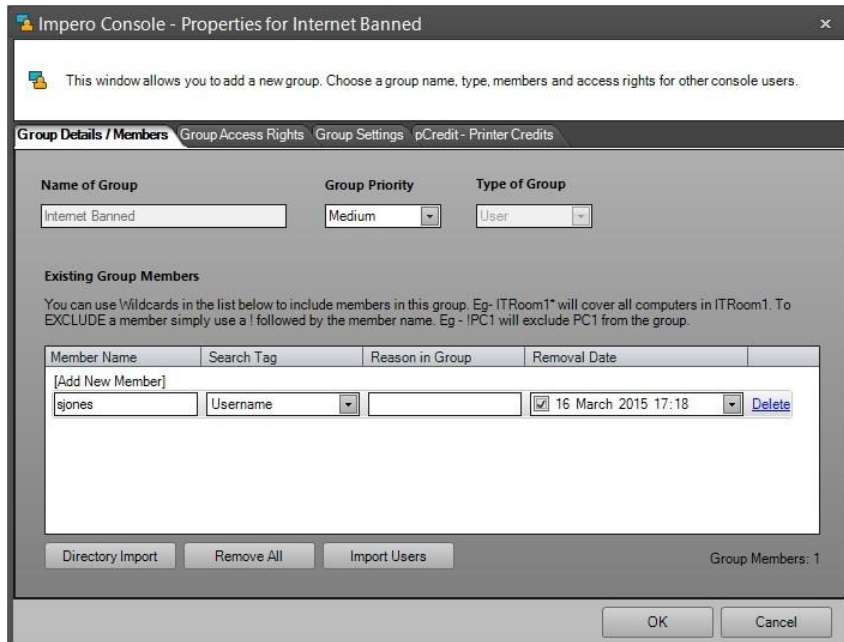


Image 90.1 - Group Properties

4.2 Lock Screen, Keyboard & Mouse

You can lock the screen, keyboard and mouse for the entire group or individual users.

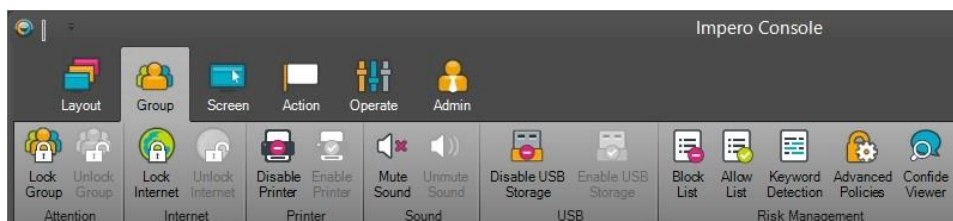


Image 91 - Group Toolbar

Entire group:

Locking the screens for the entire group is a very simple process. Make sure you are on the correct group and you can see your users. Click on the 'Group' from your toolbar and select 'Lock Group'. Remember, you do not have to select any users as this locks all of the members in this group. This locks the screen, keyboard, and mouse of all computers in your group.



Image 91.1 - Locked Screen

To return the computer screens back to normal click on the 'Group' from your toolbar and select 'Unlock Group'.

Lock screen, keyboard, and mouse for user(s)

By selecting different users, you are able to lock their screen, keyboard, and mouse for a set amount of time. Since you are locking the users, whichever computer they logon on to, is locked.

1. Select [Computer List](#) tab.
2. [Select](#) the users.
3. Drag and drop one of the users onto the group 'Screens Locked'.

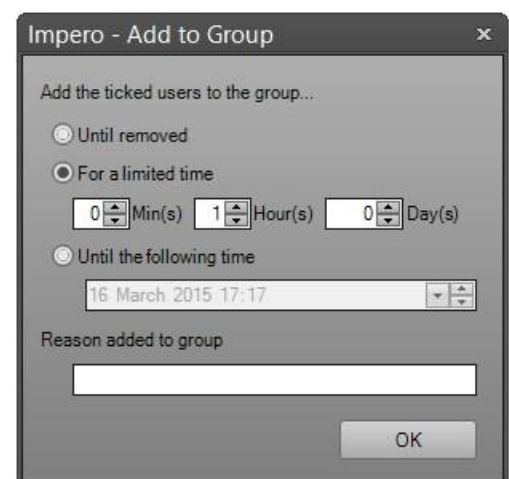
Note: If you right mouse click on a user then click on 'Add To Group' and select 'Screens Locked'; then it adds these users until they are removed.

4. A dialogue box appears (Image 91.2) asking for how long the screen, keyboard and mouse should be locked for.

Until Removed: Forever

For a limited time: Pre-set time intervals

Until the following time: This provides a calendar to allow you to pick the date and then you can adjust the time



Note: You can modify the default selection in this dialogue box through the Impero Server.

5. Screen, keyboard and mouse are locked until it is either manually removed or the time expires.

Image 91.2 -

Add to Group.

Note: When locking a user screen, keyboard and mouse, it is locked for every computer that user tries to user.

Return a user's screen back to normal

[Select](#) the user(s) and right mouse click on top of their name and select 'Remove from Group' and then 'Screens Locked'.

If the user is not currently logged on but you would like to remove the ban, then right-click on the 'Screens Locked' Group and select properties. This opens (Image 91.3), then you can locate the username and click on the delete button on the right-hand side.

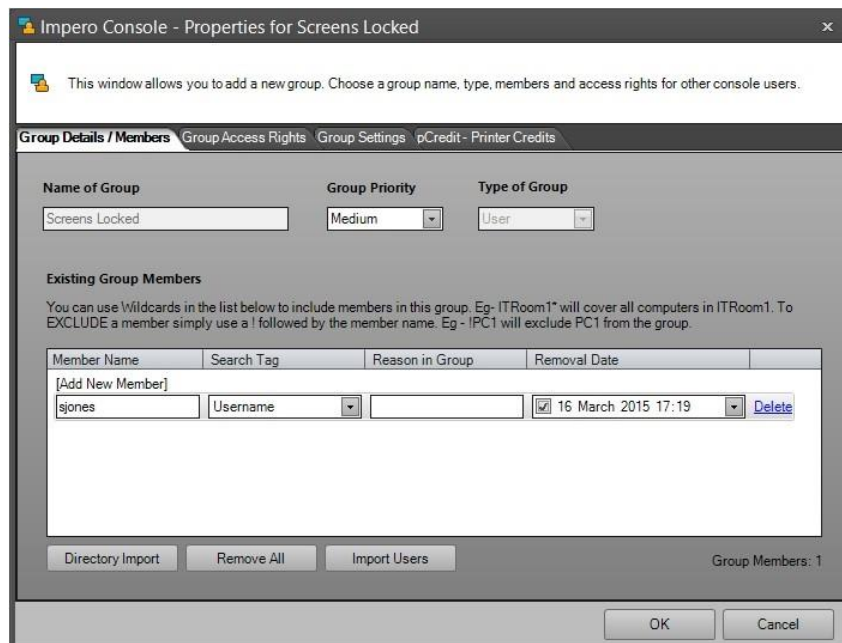
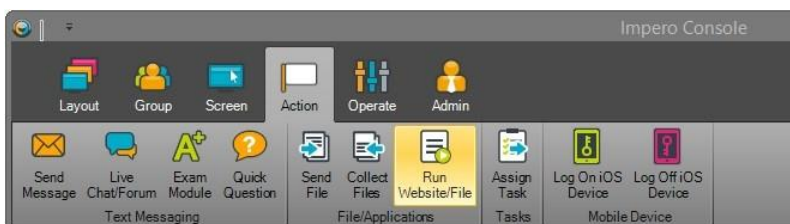


Image 91.3 - Properties of Screens Locked

4.3 Run Website/Program on all PCs

This allows you to quickly open a website or a program on one computer or the entire group at once.

1. Select the required users you wish to 'Run Website/File' on.
2. Open 'Action' toolbar and then click on 'Run Website/File' (Image 92).
3. You can type in, or browse to, an application name or file, and select 'Run' (Image 92.1).
4. Or select the 'Website' tab, enter a web address, select a browser and click on 'Launch' (Image 92.2).



- Once you click on the 'Run' or 'Launch' button, your selected file, application or website is then displayed on all of the computers that you have selected.

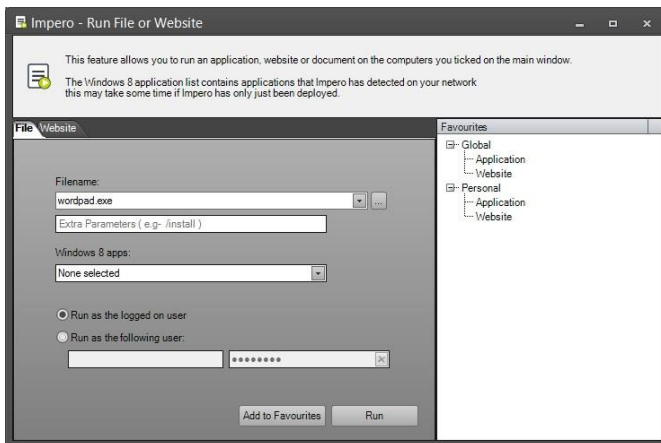


Image 92.1 - Run Website address

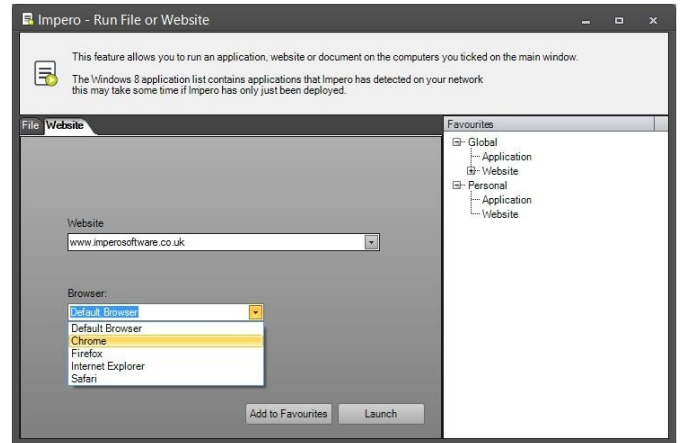


Image 92.2 - Run File

4.4 Only Allow Certain Websites

- Click on the 'Groups' icon and then click on 'Allow List' (Image 93).



Image 93 - Group Toolbar

Note: When the Allow List is empty it allows all websites.

- Enter part of the website, for example 'google', at the bottom of the page and click on 'Add' (Image 93.1).
- If you would like to add more websites, then just repeat Step 2.

This blocks all websites except for the ones you added to the Allow List.

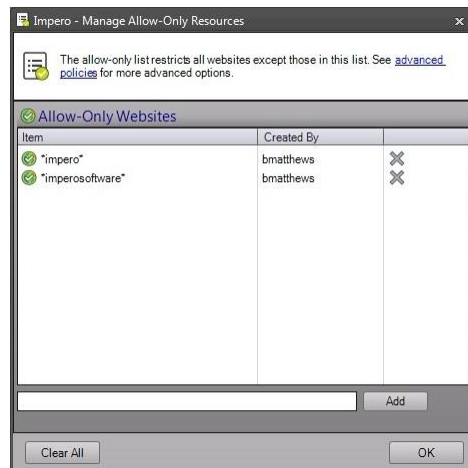


Image 93.1 - Allow List

How to remove the Allow List

1. Click on the 'Groups' icon and then click on 'Allow List'.
2. To remove the entire list, click on 'Clear All' at the bottom of the page.
3. To remove single entries from the Allow List, click on the X to the right of any website address you have listed.
4. When the Allow List is empty it allows all websites.

Hint: If users get an error message saying 'not on the allowed list' or 'about blank page' then something has been left in the allow list. The allow list must be cleared before users are allowed to visit other websites.

4.5 Sending Files to Users

This function allows you to send a file to users and gives you the option to open the file for them.

1. [Select](#) the users to receive the file.
2. Open 'Action' toolbar and then click on 'Send File' (Image 94).

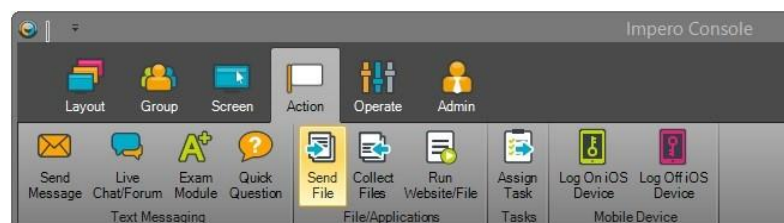


Image 94 - Send File

3. Under 'Select File to Send' (Image 94.1), on the left-hand side of the window, locate the file you would like to send to the users.
4. Under 'Send Options' you have a couple of additional options to choose from:
 - Save the file to users home directory (under ImperoDownloads)
 - Save the file to the following location: Enter the desired location for the file to be saved to
 - Run the file after sending as the logged in user (this option opens the file for the user)
5. Click on the 'Send' Button.
6. A Send Progress bar is displayed at the bottom indicating current percentage of the sending file.

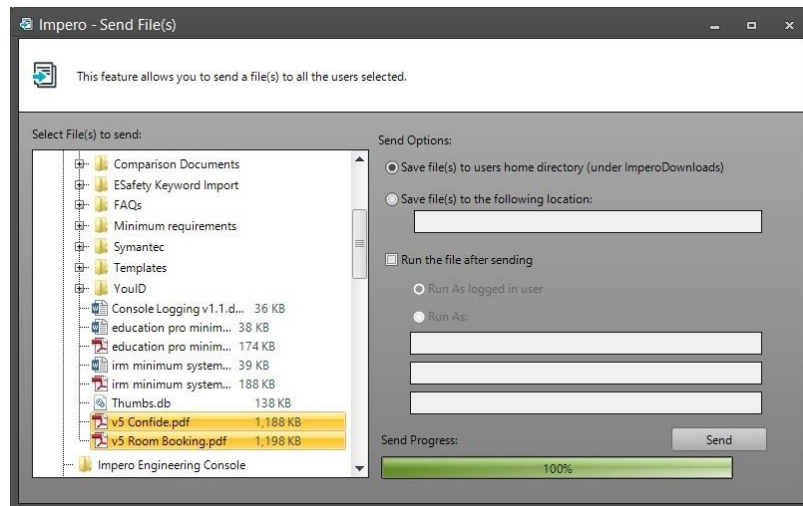


Image 94.1 - Send File

4.6 Collecting Files from Users

This function allows you to collect files from selected users.

1. [Select](#) the required users you wish to collect files from.
2. Open 'Action' toolbar and then click on 'Collect Files' (Image 95).

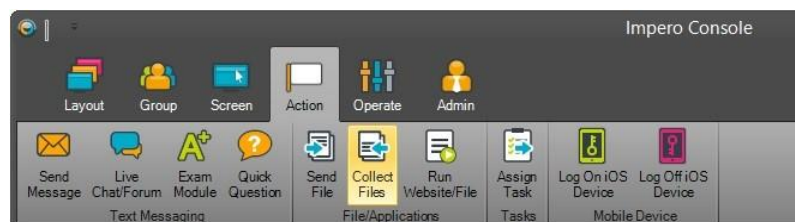


Image 95 - Collect Files

3. Impero creates a folder with today's date as the name and save the collected files from the users to this location.
4. Click on 'Ask For Files' button (Image 95.1).

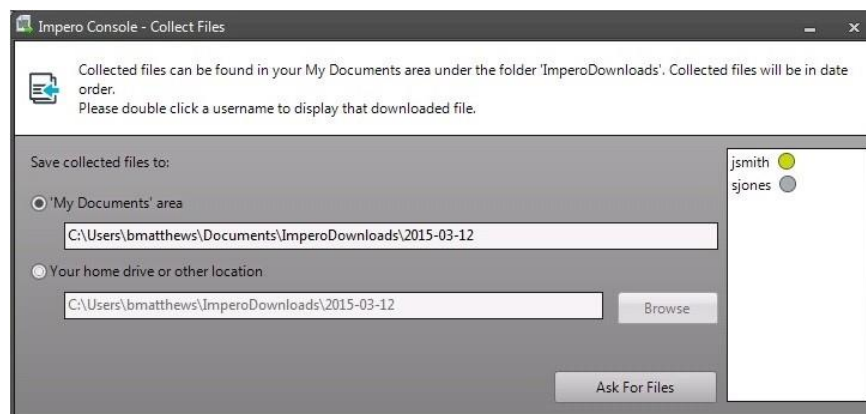


Image 95.1 - Receive File

5. 'My Documents' window is displayed on the user desktop (Image 95.2).



Image 95.2 - My Documents

6. The user is required to select the file that they wish to send to you.

7. Impero then takes the username and appends it to the front of the file name for quick identification (Image 95.3).

Example:

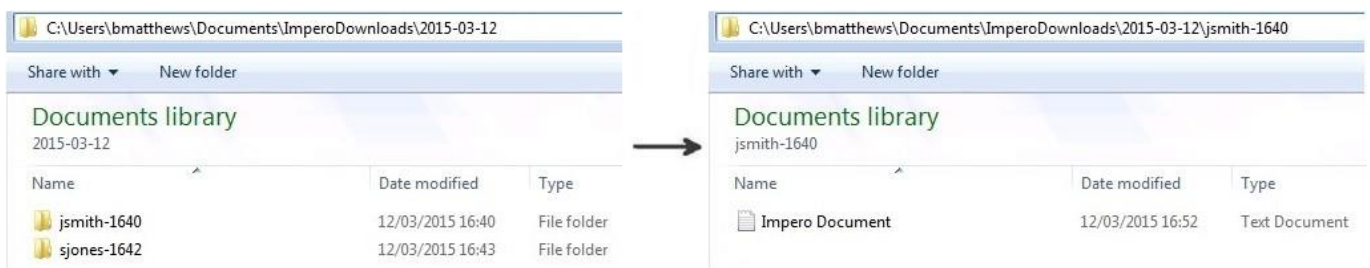


Image 95.3 - Collected File

Before Collection: \\User\My Documents\Science Report.doc

Once Collected: \\Admin\My Documents\today's date\David - Science report.doc (Image 95.3)

Note: You are only receiving a copy of the file as the user still has the original.

8. To view the files you have collected click on the 'View Files' button at the bottom of the dialogue box (Image 95.1), or open 'My Documents' and click on ImperoDownloads\today's date.

4.7 Let a User Lead a Session

This function allows you to let a user lead a session, so that other selected users view the lead user's session.

1. [Select](#) the users who you wish to receive the session.
2. Click on 'Broadcast Screen' from the 'Screen' Toolbar (Image 96).

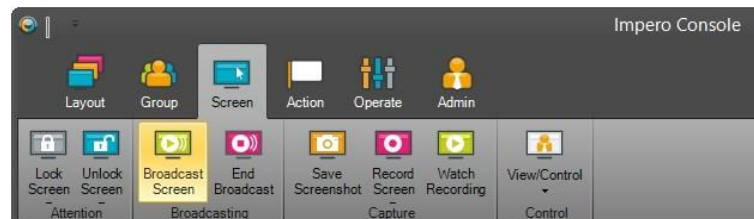


Image 96 - Screen Toolbar

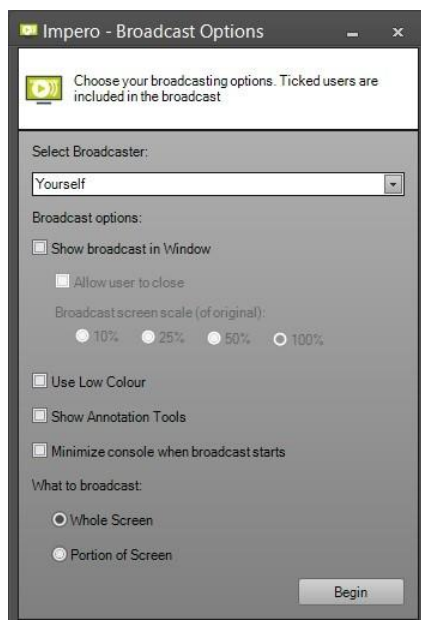


Image 96.1 - Broadcast Screen

3. The Impero - Broadcast Options dialogue window opens (Image 96.1).
4. Click on 'Select Broadcaster' and change it from yourself to the user you wish to lead the session.
5. Click on 'Begin' to broadcast the screen in full, or select 'Show broadcast in Window' and select the desired size.
6. Click on 'End Broadcast' from the Screen toolbar to stop broadcasting (Image 96).

Note: 'Show Broadcast in Window' allows users to switch between open windows by using Alt+Tab.

4.8 Unlocking a User Computer

Scenario: A user was working on a computer in your room. They have now left the room and did not log off the computer. The computer can now only be unlocked by that user or a network administrator. You can overcome this problem by unlocking the computer or logging off the user immediately.

To unlock a user's computer:

1. [Select](#) the desired users.
2. Click on the toolbar 'Operate' and then 'Unlock Station' or 'Log Off'.

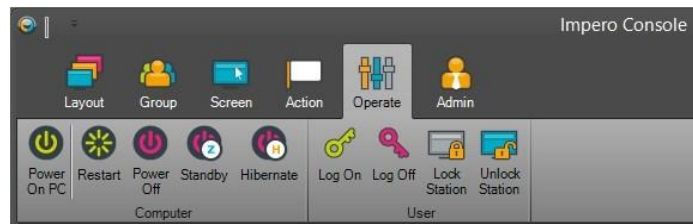


Image 97 - Operate Toolbar

Unlock Station: This gives you the ability to save any work they may have left open before logging them off. Log Off: This logs the user off immediately without saving any work.

4.9 Take a Screenshot of the Entire Group

1. [Select](#) the desired users.
2. Click on the 'Screen' toolbar and then 'Save Screenshot' (Image 98).

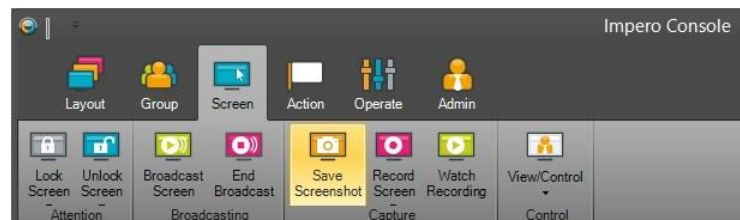


Image 98 - Screen Toolbar

3. Click on 'Save All' from the Menu (Image 98.1).
4. Select a folder or create a new folder.
5. Click on 'OK'.
6. This saves all of the screenshots. Impero automatically creates a file name for each screenshot by combining the username and computer name.

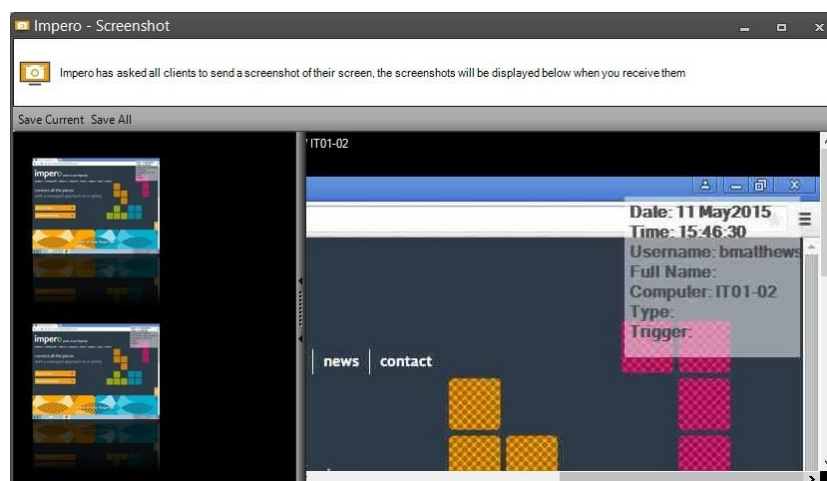


Image 98.1 - Save Screenshot

Note: Each screenshot has an identifier stamp in the top right-hand corner of the screen, which displays a time stamp and information relating to the user/ computer (Image 98.1). You can select each screenshot individually by clicking on the thumbnail in the left panel, which opens the screenshot in actual size in the

right-hand panel. You are required to use the scroll bars in order to view different parts of the screen or maximize the window for a better view.

4.10 How to Create a Quick Question

This function allows you to ascertain quickly if the users understood the session. By using the quick question feature of Impero, the user is not singled out if they answer incorrectly. This allows you to see who needs the session reviewing.

1. [Select](#) the required users you wish to receive the Quick Question.
2. From the 'Action' toolbar select 'Quick Question' (Image 99).

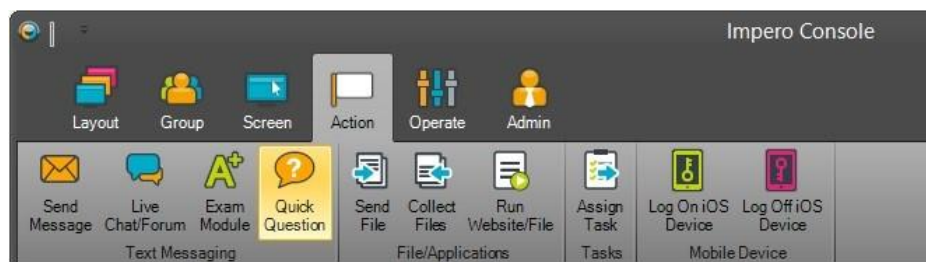


Image 99 - Action Toolbar

3. Enter a question (Image 99.1).
4. Pick the type of question you want:
 - Yes/No: One answer.
 - Written Answer: User types in their answer which then displays in your answer window.
 - Multiple Choice: Maximum of 6 possible answers.
5. Then type in the answers below unless it is the Yes/No question.
6. Click on 'Send Question' button.
7. The selected users receive the question on their desktop.

The image shows a screenshot of the 'Impero - Ask Question' dialog box. The dialog box has a title bar with the text 'Impero - Ask Question'. Inside the dialog box, there is a text input field with a placeholder text 'Ask a quick question here'. Below this field, there is a section labeled 'Question:' with a text input field containing the text 'What is the capital of England?'. Below the question field, there is a section labeled 'Answer Type:' with three radio button options: 'Yes / No', 'Written Answer', and 'Multiple Choice'. The 'Multiple Choice' option is selected. Below the 'Multiple Choice' option, there are six text input fields for answers. The first three fields contain the text 'Liverpool', 'Birmingham', and 'London'. The last three fields contain the text 'Manchester', 'Option 5', and 'Option 6'. At the bottom right of the dialog box, there is a button labeled 'Send Question'.

Image 99.1 - Quick Question

8. Once the user answers the question the window closes.

9. On your desktop you see a dialogue box (Image 99.2); this displays the results in a bar chart, along with each username and the answers they give.

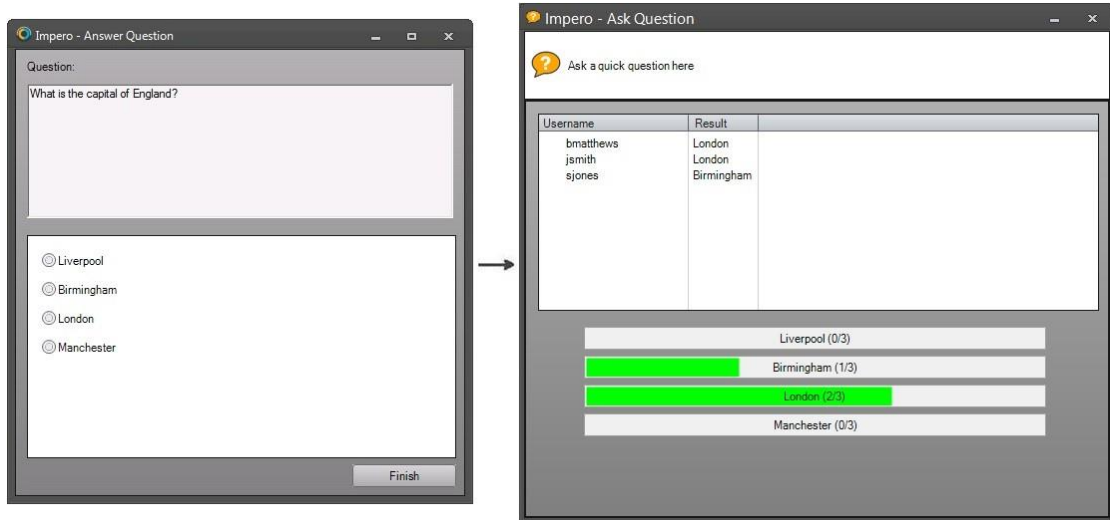


Image 99.2 - Quick Question Results

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