

# FORTRA

## User Guide

Advanced Reporting Suite  
11.2

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# Advanced Reporting Suite

## Overview

Advanced Reporting Suite is a dynamic Service Level Agreement (SLA) and Performance Reporting interface that collects performance data from multiple operating platforms and produces customized reports to prove adherence to the SLA and flags any issues so they can be quickly resolved.

If you have taken the option of including Enterprise Console Reporting, available via an updated license key, Advanced Reporting Suite can also be used to generate reports based on the alert information received by the Enterprise Console.

Advanced Reporting Suite ships with standard, pre-defined reports. It dynamically reports on hundreds of individual Windows Management Instrumentation (WMI) specifications, numerous AIX and Linux performance indicators, and IBM i systems management metrics, including percentage performance against SLAs, processor loading, CPU memory and disk, SAN utilization, performance response times, resource utilization, and many more.

Reports can be viewed before publishing and comments added as required. They can either be published to a web portal—giving users quick and easy access—or output to a variety of formats including PDF, HTML, CSV, XLS and RTF. Clients can generate the same report in multiple formats to match their individual requirements.

Advanced Reporting Suite is web-enabled, allowing reports to be run directly from a browser. Authorized users can run and view their own customized reports across the web portal for quick access to the information they need. Customized reports can include corporate logos, which is particularly beneficial for companies with different brands to manage under their portfolio.

# Advanced Reporting Suite Components

The following components are included in Advanced Reporting Suite.

## Data Warehouse

A central store of performance data collected from IBM i, Windows, AIX and Linux devices across the network. This component works in the background and is not in direct visibility of the user.

## Report Designer

This component of Advanced Reporting Suite allows the creation of customized templates for performance reports, either by starting with a blank canvas or by using the inclusive Report Wizard.

## Web Interface

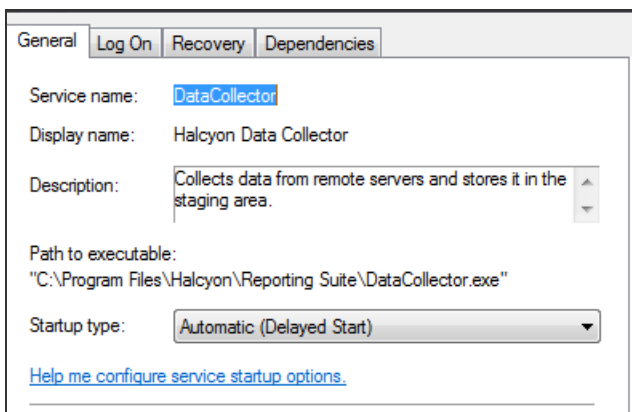
Allows the definition of the devices from which data is collected, set the collection periods and export/view the performance data into the templates defined within Report Designer. This component contains:

- **Data Collector** - Collects data from the defined devices and stores it in the Data Warehouse.
- **Data Processor** - Processes the collected data ready for inclusion in a report.

# Configuring Local SQL Server Settings

If the network configuration has a supported version of SQL Server running on the same machine on which Advanced Reporting Suite has been installed, it is advised to set the **Reporting Services** to **Automatic (Delayed Start)**. This ensures that SQL is started before both the Data Collector and Data Processor services begin.

1. Open the **Windows Control Panel**.
2. Select **Administrative Tools | Services**.
3. Select **Halcyon Data Collector**.
4. Right-click on **Halcyon Data Collector** and select **Properties**.
5. In the **General** tab, set the **Startup Type** to **Automatic (Delayed Start)**.

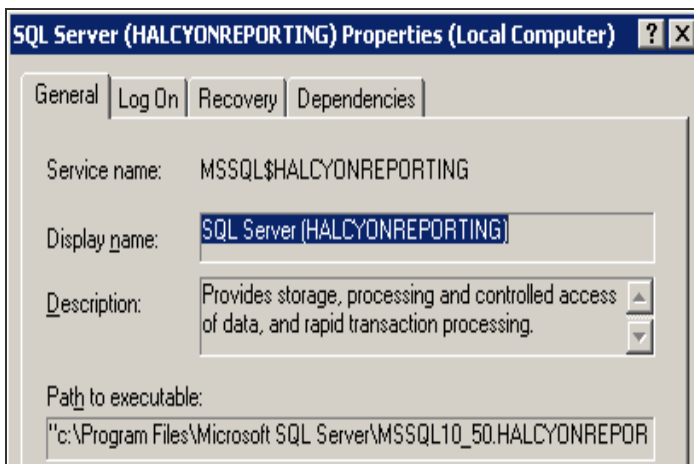


6. Repeat the above process, substituting **Halcyon Data Processor** for the Halcyon Data Collector service.

If the SQL Server options do not support the Automatic (Delayed Start) option:

It is recommended that the registry settings of the services are edited to ensure the correct start-up of the Data Collector and Data Processor.

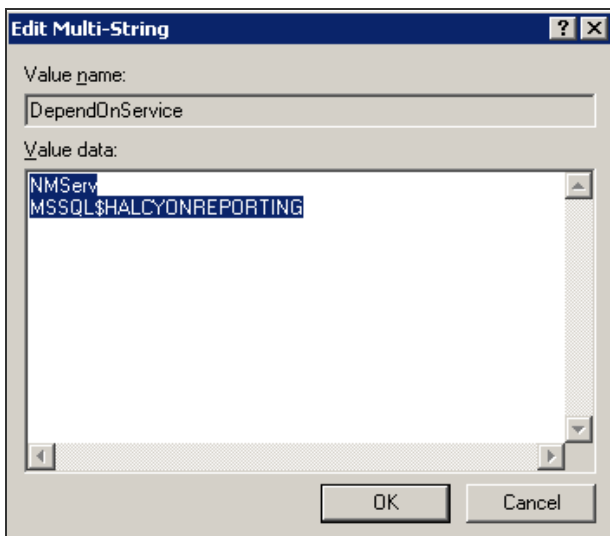
1. Open the **Windows Control Panel**.
2. Select **Administrative Tools | Services**.
3. Locate the name of the **SQL Server instance** (in this example it is **MSSQL\$HALCYONREPORTING** - see screen shot below).
4. Right-click on the **SQL Server instance** and select **Properties**.



## Specifying Multi-String Values

To ensure that both the Advanced Reporting Suite services have Multi-String Values, the registry settings must be edited.

1. From the Windows **Start** command, type **regedit** and press **Enter**.
2. From the left-hand navigation panel expand the **HKEY\_LOCAL\_MACHINE** folder.
3. Expand the **SYSTEM** folder, followed by the **ControlSet001** folder and the **services** folder. The full path should now read as:  
**HKEY\_LOCAL\_MACHINE | SYSTEM | ControlSet001 | services**
4. From within the **services** folder locate the **Data Collector** service and click to select.
5. In the right-hand navigation pane, ensure that the **DependOnService** setting is present and double-click to edit. See [Should the DependOnService Multi-String not exist](#) if the service is not present.
6. Add the name of the **SQL Server instance** (in our example; **MSSQL\$HALCYONREPORTING**), press **Enter** and click **OK**.



The SQL Server instance has now been added.

- Repeat steps 4 to 6 for the Data Processor service.

**NOTE:** The NMServ parameter is not required for the Data Processor service.

## Should the DependOnService Multi-String not exist

If the DependOnService multi-string value does not exist, it needs to be created manually.

- From within **RegEdit** and with the service for which the **DependOnService** entry needs to be created (Data Collector or Data Processor) selected, click anywhere in the right-hand navigation panel and select **New | Multi-String Value**.

A **New Value** is created and the name is ready to be edited.

Name	Type	Data
(Default)	REG_SZ	(value not set)
Description	REG_SZ	Processes data in the staging area and inserts it int...
DisplayName	REG_SZ	Halcyon Data Processor
ErrorControl	REG_DWORD	0x00000001 (1)
ImagePath	REG_EXPAND_SZ	"C:\Program Files (x86)\Halcyon\DataProcessor.exe"
ObjectName	REG_SZ	LocalSystem
Start	REG_DWORD	0x00000002 (2)
Type	REG_DWORD	0x00000010 (16)
New Value #1	REG_MULTI_SZ	

- Change the name of the value to **DependOnService** and press **Enter**.
- Double-click on this entry to open it ready for editing.
- Type **NMServ** and press **Enter**.
- Add the name of the **SQL Server instance** (in our example; MSSQL\$HALCYONREPORTING) and click **OK**.

The DependOnService multi-string value has now been created for the chosen service. Repeat if necessary for the other service, otherwise close the Registry Editor panel.

The Data Collector and Data Processor services are now dependent on the local instance of SQL Server and should start up correctly.

Please contact [support.halcyon@fortra.com](mailto:support.halcyon@fortra.com) if you experience any issues connecting to the local SQL Server instance.



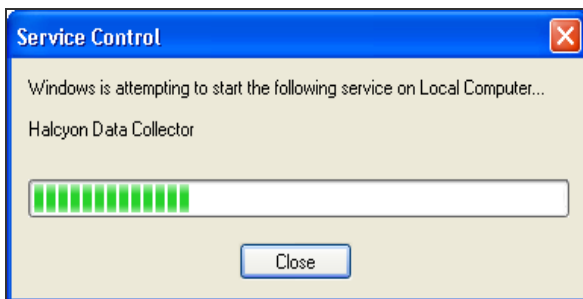
## Checking the required services are running

Following installation, the Halcyon Data Processor and Halcyon Data Collector Services should begin automatically. See [Configuring Local SQL Server Settings](#) for more information.

If it appears that data is not being collected and/or processed, it may be that one (or both) of the Halcyon Services are not running.

To check if the services are running:

1. From the Windows **Start** command select **Control Panel | Administrative Tools | Services**.
2. Scroll-down through the list of services until you reach the **Halcyon Data Collector** and **Halcyon Data Processor** services. Both of these services should have a status of started. If the status is anything other than started then the service(s) must be started manually.
3. Click on the required service so that it is highlighted. The name of the service appears to the left of the services list.
4. Click **Start** to manually start the service. A progress bar is displayed while the service attempts to start.



Once the service has started then data will be collected (processed) from that point on.

**NOTE:** If the service cannot be started manually then please contact [support.halcyon@fortra.com](mailto:support.halcyon@fortra.com).

# Web Service Start-up and Initial Registration

## Start-up

1. Log on to the local machine using your preferred Internet Browser and port 8000, (for example; <http://localhost:8000>).
- See [Changing the Port Number](#) if the port number does not work or is unavailable.

The Advanced Reporting Suite Log On screen is displayed.

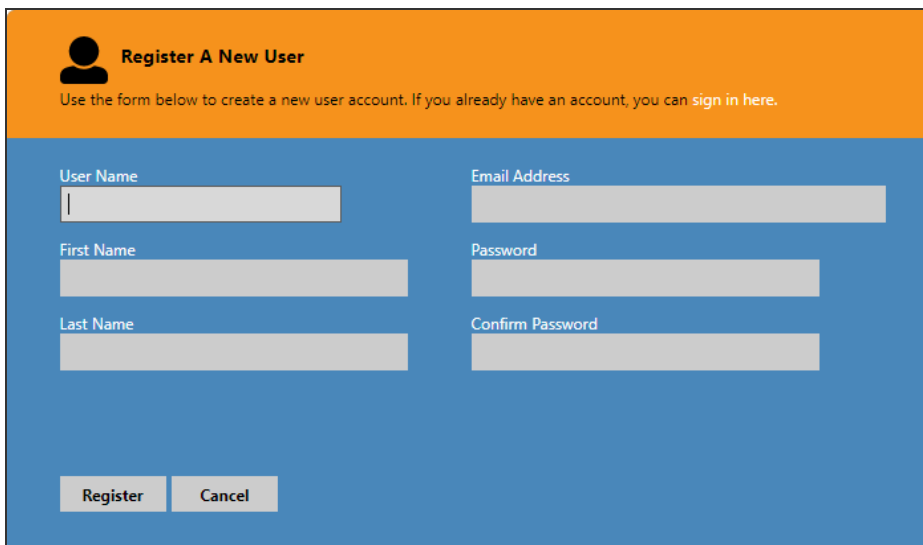


The image shows the Halcyon Advanced Reporting Suite Log On screen. It has a blue header with the Halcyon logo and the text "Advanced Reporting Suite". Below the header, there are two input fields for "User Name" and "Password". At the bottom, there are two buttons: "Log On" and "Register". Below the buttons, there is a link that says "Forgot your Password?".

## Registration

Upon first use of Advanced Reporting Suite, you must register in order to gain access.

1. Click **Register** to proceed. The **Register A New User** dialog is displayed.



The image shows the "Register A New User" dialog. It has an orange header with a user icon and the text "Register A New User". Below the header, there is a message: "Use the form below to create a new user account. If you already have an account, you can sign in here." The form has six input fields: "User Name", "Email Address", "First Name", "Last Name", "Password", and "Confirm Password". At the bottom, there are two buttons: "Register" and "Cancel".

The following parameters must be completed.

### User Name

Enter a **User Name** by which this user is identified when using the Advanced Reporting Suite GUI.

### First Name

Type the user's actual **First Name**.

### Last Name

Type the user's actual **Last Name**.

### Email Address

Enter the user's **Email Address**. This is required so that the user can be contacted should they forget their password.

### Password

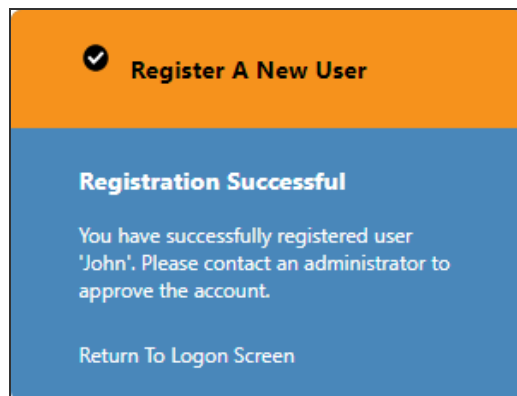
Enter a password (minimum of 6 characters) to be associated with the entered User Name.

### Confirm Password

Re-enter the password exactly as typed in the previous parameter.

Click **Register** to create the user.

Providing all the fields have been completed correctly a **Registration Successful** message is displayed.



Click **Return to Logon Screen** to continue.

## Log on

Type the **User Name** and **Password** combination that you have just created and click **Log On** or press **Enter** to logon to Advanced Reporting Suite.

# Licensing Advanced Reporting Suite


**NOTE:** These instructions apply to the first time use of Advanced Reporting Suite. To edit the details of an existing license please see Editing a License.

Prior to using the Advanced Reporting Suite GUI you must enter a valid license code. Access to menu options and features is restricted until a valid license code is assigned.

A trial code can be obtained from [\[\[\[Undefined variable halcyonvariables.LicenseKeyEmail\]\]\]](#). A permanent code is issued upon purchase of a full license.

**NOTE:** If you are using Advanced Reporting Suite for the purposes of Enterprise Console reporting, you must ensure that the appropriate license has been generated, otherwise this option will not be available.

To assign the license:

1. From the main display, click **Actions** in the **Administration** tab heading panel.
2. From the drop-down menu, click  **Add**. The Add License dialog is displayed.
3. Copy the Advanced Reporting Suite License code from your HelpSystems communication and paste it into the **License Code** parameter on the **Add License** dialog.
4. Click **OK** to continue.

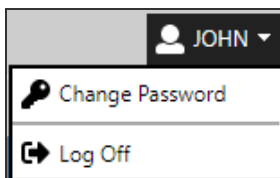
The license is now displayed with the Expiry Date in the main panel view of the display.

**NOTE: IMPORTANT!** You must now log off and log back on to Advanced Reporting Suite in order to activate the license code and validate the installation.

## Logging Off Advanced Reporting Suite

To Log Off:

1. Click the **User Name** in the **Administration** tab heading panel of this display.
2. From the drop-down menu click **Log Off**.



# Administration

The Administration section is used to configure the Advanced Reporting Suite software to your requirements. From within this section you can create, amend and delete the following:

## Data

Data settings control the groups, collections and report definitions. A brief summary of each is shown below:

- **Groups:** A Group is a way of defining a set of Collections, Reports and Users that are intended for a similar purpose.
- **Collections:** A collection is the method by which performance data is gathered from the various systems.
- **Reports:** Reports are used in Advanced Reporting Suite to display the results of the Collections for each Group.

## Account

Account settings are used to define roles (the level of access granted within Advanced Reporting Suite and the users who

- **Roles:** A definition of the level of access that a User, or group of Users is given within Advanced Reporting Suite.
- **Users:** A User is individual person who has their own log-in defined and who is assigned a role and group for the purpose of using Advanced Reporting Suite.

## Settings

This section is used to define the collection and processing of data, registration and SMTP server settings and the product licensing.

- **Data Collector:** Used to collect performance and system data from the defined systems.
- **Data Processor:** Used to process the collected data.
- **Application:** Used to define self-registration and SMTP server settings.
- **License:** Used to apply and edit the license key that permits the use of Advanced Reporting Suite.

## Plugins

This section is used to define system defaults at Operating System (and Enterprise Console if the appropriate license has been applied) level that can then be applied to the collections.

## Groups

A Group is a way of defining a set of Collections, Reports and Users that are intended for a similar purpose. A Group is the primary structure within Advanced Reporting Suite.


Examples of Groups, include:

- Individual Customers (for managed service providers)
- Data Centers (or specific areas within a Data Center)
- Regional Office Locations

**NOTE:** At least one Group must exist in Advanced Reporting Suite and have at least one Collection and Report assigned to it.

## Adding a Group

To add a Group:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Groups**.
3. Click **Actions** from the menu panel in the **Administration** tab heading panel.
4. From the drop-down menu, click  **Add**. The **Add Group** dialog is displayed.

There are four tabs of information that must be completed when adding a Group.

**NOTE:** You may need to define other elements first within Advanced Reporting Suite before you can fully complete the Group information.

### Group Tab

This is used to define the name and description of the Group.

1. Enter a **Name** by which the Group is identified in Advanced Reporting Suite.
2. Enter a textual **Description** of the Group.
3. Click the **Collections** tab.

## Collections Tab

This is used to define which Collection apply to this Group.

**NOTE:** At least one Collection must be defined for the Group.

1. Select the **Devices** from which the Collections are made for this Group.

**TIP:** Click **All Collections** to select all Devices for this Group.

2. Click the **Reports** tab.

## Reports Tab

This is used to assign Reports to the Group.

**NOTE:** At least one Report must be assigned to a Group.

1. Select the **Reports** to be assigned to this Group.

**TIP:** Click **All Reports** to assign all the Reports to this Group.

2. Click the **Users** tab

## Users Tab

This is used to provide users access to the Collections and Reports that are defined for this Group. A user must belong to a Group in order to be able to see the Reports contained within.

1. Select the **Users** to be assigned to this Group

**TIP:** Click **All Users** to assign all the defined users to this Group.

Click **OK** to add the Group to Advanced Reporting Suite.

The Group is now displayed in the main display and Details display panel of Advanced Reporting Suite.



## Editing Groups


Editing a Group allows you to amend any of the existing Group parameters.

See [Adding a Group](#) for details of the parameters that can be amended when editing a Group.

## Duplicating Groups

Duplicating a Group allows you to copy the details of an existing Group into a newly named Group. Using this feature allows the rapid population of Advanced Reporting Suite with all of the Groups that are required for your configuration.

To duplicate a Group:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Groups**.
3. Select the **Group** to be duplicated.
4. Click **Actions** from the **Administration** tab heading panel.
5. From the drop-down menu, click  **Duplicate**.

The **Duplicate Group** dialog is displayed.

6. Type the new Group **Name** and then use the **TAB** key to highlight the **Description** which can then be amended as required.
7. When the new Group details have been added, click **OK**.

The new Group is now added and displayed in the main display and Details display panel of Advanced Reporting Suite.

**NOTE:** Groups must be uniquely named within Advanced Reporting Suite. Groups that attempt duplication with a name that already exists are rejected with the message 'A Group With This Name Already Exists'.

## Deleting Groups

Deleting a Group allows you to remove Groups that are no longer required from Advanced Reporting Suite.

To delete a Group:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Groups**.
3. Select the **Group** to be deleted.
4. Click **Actions** from the **Administration** tab heading panel.
5. From the drop-down menu, click **Delete**. The **Delete Group** dialog is displayed.
6. Click **Yes** to delete the Group.

The Group is removed from the system and is no longer available for use or selection within Advanced Reporting Suite.

## Group Details/Collections/Reports/Users Panel

When Groups is selected from the left-hand menu panel of Advanced Reporting Suite and a Group highlighted in the main display, a secondary panel is displayed allowing access to four panels of information that directly relate to the selected Group. This allows you direct access to the key information of each Group without having to return to the left-hand menu panel each time.

The following panels are available on this display.

### Details Panel

Click the **Details Tab** to view the basic details of the selected Group.

### Collections Panel

Click the **Collections Tab** to view the collections that are currently assigned to the selected Group.

### Reports Panel

Click the **Reports Tab** to view the reports that are currently assigned to the selected Group.

### Users Panel

Click the **Users Tab** to view the users that are currently assigned to the selected Group.

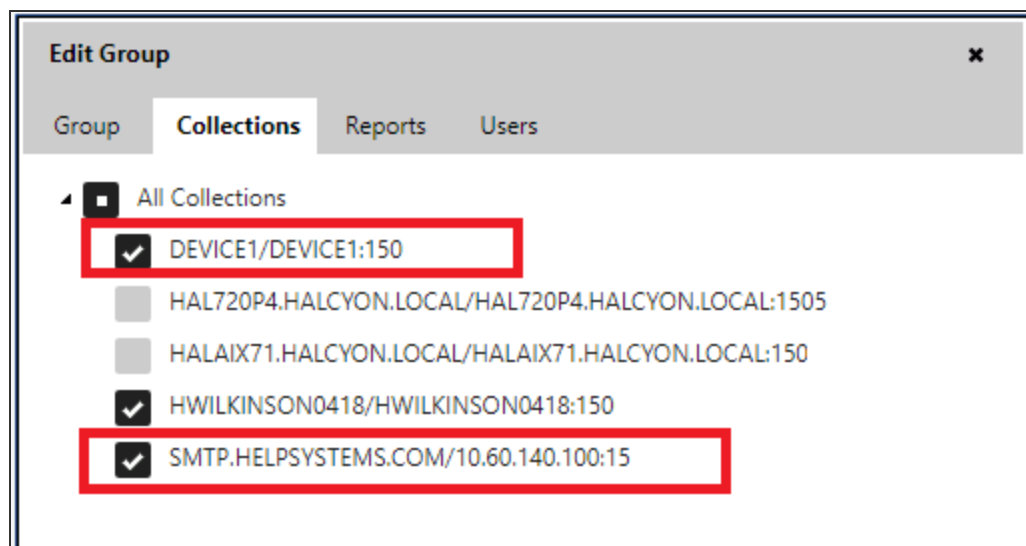
**NOTE:** It is only possible to view the current settings using this panel. To edit settings, use the left-hand menu panel to select the element that you wish to change together with the **Edit** option from the **Actions** button.

## Reporting on SNMP and Syslog Devices

It may be that SNMP and Syslog devices have been defined and exist in the Enterprise Console but do not need to be setup as Collections in Advanced Reporting Suite.

As these devices are defined in Enterprise Console they can generate alerts, however because there are no Windows collections for these non-agent devices it is not possible to select them in order to report on them.

To resolve this issue, the devices need to be assigned to a group as a collection, as shown in the screen shot below.



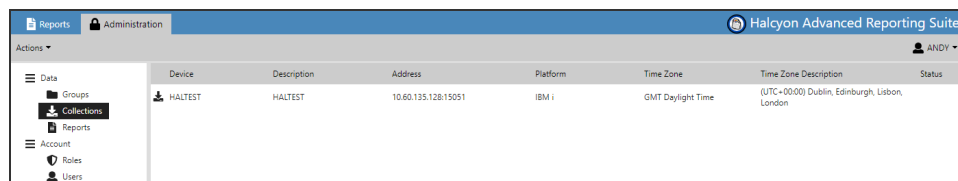
# Collections

A collection is the method by which performance data is gathered from the various systems on the network.

Prior to any data being collected, the devices must be defined and Data Collector service operating parameters set. These define from which systems and how performance data is collected and to which Groups the collection is assigned.

Data may be collected from IBM i, Windows, AIX, and Linux devices.

**NOTE:** If you use the forwarding alerts feature in Enterprise Console, i.e. the sending of alerts from one Enterprise Server to another, you must manually define each of the devices from which the alerts are forwarded in the Device Manager of the central Enterprise Server to which the alerts are sent, in order to be able to report on these devices.



Device	Description	Address	Platform	Time Zone	Time Zone Description	Status
HALTEST	HALTEST	10.60.135.128/15051	IBM i	GMT Daylight Time	(UTC+00:00) Dublin, Edinburgh, Lisbon, London	

**TIP:** If Time Zone is currently in Daylight Saving Time then the associated Daylight Name is shown in this field. Otherwise the Standard Name is used.

## Adding a Collection

To add a Collection:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Collections**.
3. Click **Actions** from the **Administration** tab heading panel.
4. From the drop-down menu, click **+ Add**.

The **Add Collection** dialog is displayed, which is split into three separate tabs:

## Device Tab

The Device tab specifies the details of the device from which the Collection is made.

### Platform

Use the drop-down menu to select the operating platform for this device. The possible selections are:

- IBM i
- IBM AIX
- Linux
- Windows

### Name

Enter the **Name** of the device from which you wish Collections to be made. The entry made in this parameter **must** be the same as the system name by which the device is recognized on your network.

### Description

Enter a textual **Description** of the device. The description can then be used when creating a report template. If left blank, the device name is used.

### Address

Enter the **Host Name** or **IP Address** on which the device is available on the network.

### Port

Enter the **Port Number** of the environment on which the IBM i device is configured to send network data. By default, this parameter is set to Port 15000. If you have multiple environments on the IBM i device, select the Port Number of the environment from which you wish to collect performance data. This can be found from with option **42=Configuration** followed by option **3=Work with Environments** from within your Halcyon Product Suite.

This setting does not apply to Windows, AIX or Linux devices so can be left at the default setting of 15000. Please refer to your Halcyon Product Suite User Guide for more information regarding Working with Environments.

## Connection Timeout

The entry in this field sets the time within which the connection must be made to the device before timing out. The default setting for this field is 300 seconds (5 minutes).

## Read Timeout

The entry in this field sets the time limit for the beginning of the reading of data from the device before the attempt fails. The default setting is 300 seconds (5 minutes).

## Time Zone

The time zone should be selected if the device being setup is located in a different time zone to the source machine on which the Advanced Reporting Suite is installed.

From the time zones listed on the drop-down choice menu, select the correct time zone for the location of the device.

**NOTE:** Data is stored at Co-ordinated Universal Time (UTC) / Greenwich Mean Time (GMT).

Once the Device details have been completed, select the **Collection** tab to be able to configure the collection parameters.

## Collection Tab

The Collection tab allows you to specify the collection parameters for the device. These parameters change according to the type of device. The initial settings are taken from the system defaults specified in the [Plugins](#) section.

### For IBM i Devices:

## Collection Interval

Enter the time interval between which collections of performance data are made for this device. The default setting is 60 seconds.


Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

### Daily Collection Time (Remote)

Disk data collection is normally made at midnight. Leave this field set to 00:00:00 and the parameter is automatically configured from the setting in the Time Zone parameter set when configuring the Device Details. The time setting applied is shown in the main display panel of Advanced Reporting Suite once the Collection for the device has been added.

**NOTE:** This parameter is only for IBM i customers using Halcyon Disk Space Manager on the device being configured.

### Hold Collection

Check this box to prevent any further data collections being retrieved from this device until the check mark is removed. The  **Hold** symbol is displayed against this device in the **Status** column in the main display of Advanced Reporting Suite.

### Last Collection

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last collection made from this IBM i Device.

### Last Daily Collection

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last daily collection made from this IBM i Device.

### Last Staging Record

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last record collected from this IBM i Device.

### For Windows Devices:

**NOTE:** The settings available for Windows devices are dependent on whether Enterprise Console Reporting has been included in the license applied to Advanced Reporting Suite.

## Enterprise Console Collection Interval (Enterprise Console Reporting Only)

Enter the time interval between which collections of performance data are made for this device. The default setting is 60 seconds.

Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

## Enterprise Console Collect Top X Alerts (Enterprise Console Reporting Only)

Sets the value of how many alerts to retrieve on each collection interval (where X represents the number). The default setting value is 10. This can be increased but only to a maximum value of 30. This is to prevent excessive amounts of data affecting performance.

## Enterprise Console Hold Collection (Enterprise Console Reporting Only)

The default setting is ☒ **No**. All collections are retrieved in line with the period defined in the **Collection Interval** parameter. Change this setting to ☐ **Yes** to prevent any further data collections being retrieved until the setting is changed back to ☒.

## Enterprise Console Last Collection

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last collection made from this Windows device.

## Enterprise Console Last Staging Record

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last record collected from this Windows Device.

## Enterprise Console SQL Login ID

This is the default user profile needed to gain access to the SQL server from which the Enterprise Console data is accessed.

**WARNING:** Without this setting defined, Enterprise Console data will not be visible within Advanced Reporting Suite.



## Enterprise Console SQL Password

This is the password associated with the default user profile entered in the previous field. For security reasons the password is hidden from view.

**WARNING:** Without this setting defined, Enterprise Console data will not be visible within Advanced Reporting Suite

## Enterprise Console SQL Connection Timeout (seconds)

The default setting is 60. This is the maximum time for a connection to be made between the collection and SQL Server

## Enterprise Console SQL Server

The default setting is localhost\HALCYON. Use this value to specify the name of the SQL Server on which the database instance is installed.

**WARNING:** Without this setting properly defined, Enterprise Console data will not be visible within Advanced Reporting Suite

## Enterprise Console SQL Windows Authentication


The default setting is ☐ **No**. Change this setting to ☒ **Yes** if the default method of authentication to the SQL Server is via Windows authentication.

## Collection Interval (seconds)

Enter the time interval between which collections of performance data are made for this device. The default setting is 60 seconds.

Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

## Hold Collection

Check this box to prevent any further data collections being retrieved from this device until the check mark is removed. The  **Hold** symbol is displayed against this device in the **Status** column in the main display of Advanced Reporting Suite.

## Last Collection

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last collection made from this Windows Device.

## Last Staging Record

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last record collected from this Windows Device.


### For IBM i AIX and Linux Devices:

## Collection Interval (seconds)

Enter the time interval between which collections of performance data are made for this device. The default setting is 60 seconds.

Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

## Hold Collection

Check this box to prevent any further data collections being retrieved from this device until the check mark is removed. The  symbol is displayed against this device in the **Status** column in the main display of Advanced Reporting Suite.

## Last Collection

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last collection made from this Device.

## Last Staging Record

This is not a configurable default, so when adding a collection this field is blank. When the collection is active, this displays the date and time of the last record collected from this Device.

Once the Collection details have been completed, select the **Group** tab to be able to assign the collection to a Group or set of Groups.

## Groups Tab

Once you have configured the Device and Collection parameters you can assign the Collection details to one or more Groups.

Click **All Groups** to assign the Collection to all of your Groups.

Otherwise, select the individual Group to which you want to assign the Collection.

**NOTE:** A Group must have at least one Collection assigned to it.


Once the configuration of the Device, Collection and Group parameters is complete, click **OK** to add the Collection to Advanced Reporting Suite.

## Editing Collections

Editing an existing Collection allows you to amend any of the Device, Collection or Group parameters.

See [Adding a Collection](#) for details of the available parameters.

To edit a Collection:


1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Collection**.
3. Select the **Collection** to be edited.
4. Click **Actions** from the **Administration** tab heading panel.
5. From the drop-down menu, click  **Edit**. The **Edit Collection** dialog is displayed.
6. Make changes as required, moving between tabs if necessary.
7. When your changes are complete, click **OK**.

The Collection is now updated and displayed in the main display and Details display panel of Advanced Reporting Suite.

## Duplicating Collections

Duplicating a Collection allows you to copy the details of an existing Collection into a newly named Collection. Using this feature allows you to rapidly populate Advanced Reporting Suite with all of the Collections that are required for your configuration.

### To duplicate a Collection:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Collection**.
3. Select the **Collection** to be duplicated.
4. Click **Actions** from the Administration tab heading panel.
5. From the drop-down menu, click  **Duplicate**. The **Duplicate Collection** dialog is displayed.
6. Select the Device tab and enter the new Device **Name** for which this Collection applies. The entry made in this parameter must be the same as the system name by which the device is recognized on your network. If necessary, amend other details as required.
7. When the new Collection details have been added, click **OK**.


The new Collection is now added and displayed in the main display and Details display panel of the Advanced Reporting Suite GUI.

**NOTE:** Collections must be unique by device within Advanced Reporting Suite. Collections that attempt duplication with a device that already exists are rejected with the message 'A Collection Already Exists For This Device'.

## Deleting Collections

Deleting a Collection allows you to remove Collections that are no longer required from Advanced Reporting Suite.

### To delete a Collection:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Collections**.
3. Select the Collection to be deleted.
4. Click **Actions** from the Administration tab heading panel.
5. From the drop-down menu, click  **Delete**. The **Delete Collection** dialog is displayed.
6. Click **Yes** to delete the Collection or **No** to cancel the request.
7. The Collection is removed from the system and is no longer available for use or selection within Advanced Reporting Suite.

# Reports Administration

This section of Advanced Reporting Suite controls the naming, description and assignment of reports.

See [Reports](#) for more information on the exporting of reports to PDF.

Reports are used in Advanced Reporting Suite to display the results of the Collections for each Group. When the **Advanced Reporting Suite > Administration > Reports** option is selected, any Reports that have already been configured are displayed.

On first starting Advanced Reporting Suite, the **Administration > Reports** display is blank unless you have saved the standard Halcyon report templates to the database using the [Report Designer](#).


**NOTE:** A Report must be assigned to at least one Group and any users who wish to access the report must be a member of the Group to which the Report is assigned.

## Editing Reports

Editing an existing Report allows you to amend any of the Name, Description or Group parameters.

**NOTE:** A Group must be assigned at least one Report.

To edit a Report:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Reports**.
3. Single-click on the **Report** that you want to edit so that it is highlighted.
4. Click **Actions** from the menu panel in the Administration tab heading panel.
5. From the drop-down menu, click  **Edit**. The **Edit Report** dialog is displayed.
6. Make changes to the **Report Name**, **Description** and **Group** assignment as required, moving between tabs if necessary.
7. When your changes are complete, click **OK**.

The Report is now updated.

## Duplicating Reports

Duplicating a Report allows you to copy the details of an existing [Report Template](#) into a newly named Report.

The newly named Report will still need to be configured and designed in the [Report Designer](#), otherwise a direct duplicate of the Report will exist.

To duplicate a Report:


1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Reports**.
3. Select the **Report** to be duplicated.
4. Click **Actions** from the **Administration** tab heading panel.
5. From the drop-down menu, click **Duplicate**. The **Duplicate Report** dialog is displayed.
6. Type the new Report **Name** and then amend other details as required.
7. When the new Report details have been added, click **OK**.

The new Report is now added and displayed in the main display and Details display panel of Advanced Reporting Suite.

## Deleting Reports

This option allows you to remove Reports that are no longer required from Advanced Reporting Suite.

To delete a Report:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Data > Reports**.
3. Select the Report to be deleted.
4. Click **Actions** from the Administration tab heading panel.
5. From the drop-down menu, click  **Delete**. The **Delete Report** dialog is displayed.
6. Click **Yes** to delete the Report or **No** to cancel the request.
7. The Report is removed from the system and is no longer available for use or selection within Advanced Reporting Suite.

# Roles

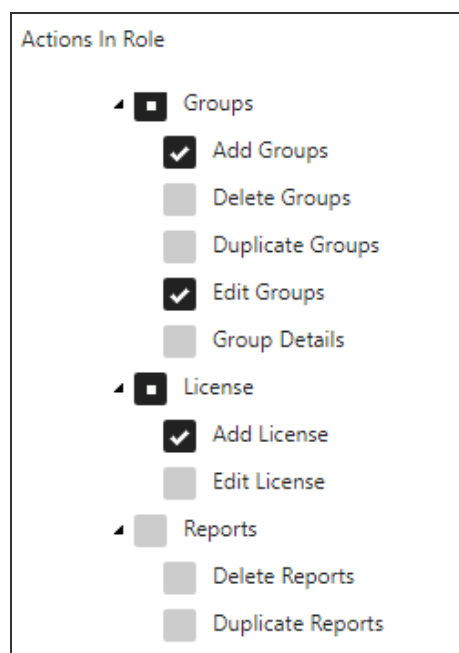
A Role is a definition of the level of access that a User, or group of Users is given within Advanced Reporting Suite. This allows you to assign access to Users according to their current Role within the organization and thus creating a hierarchy similar to that which would normally exist in the everyday business environment.

If you do not create any Roles, then every User assumes the default role of Administrator which gives full access to the Advanced Reporting Suite system and options.

To begin defining roles click **Account > Roles**. The display now shows the current Roles defined on the system and the current default User assignation.

## Role Actions

Role Actions are individual levels of access that can be used to define the level of authority that a user has within Advanced Reporting Suite.



Click on the required action to assign it to a role.

**TIP:** To add all the actions in a category, select the top level entry.

The following actions can be applied to a role.

- **All Actions:** All actions are assigned to this role. No further selection is required.
- **Collections:** All Collection actions are assigned to this role.
- **Add Collections:** The ability to add collections is assigned to this role.
- **Delete Collections:** The ability to delete collections is assigned to this role.
- **Duplicate Collections:** The ability to duplicate collections is assigned to this role.
- **Edit Collections:** The ability to add to edit collection settings is assigned to this role.
- **Export Reports:** All report exporting actions are assigned to this role.
- **Export Reports To PDF:** The ability to export reports to PDF is assigned to this role.
- **Groups:** All Group actions are assigned to this role.
- **Add Groups:** The ability to add Groups is assigned to this role.
- **Delete Groups:** The ability to delete Groups is assigned to this role.
- **Duplicate Groups:** The ability to duplicate Groups is assigned to this role.
- **Edit Groups:** The ability to edit Groups is assigned to this role
- **Group Details:** The ability to view the Group Details/Collections/Users panel in the main display is assigned to this role.
- **License:** All License actions are assigned to this role.
- **Add License:** The ability to add a license to Advanced Reporting Suite is assigned to this role.
- **Edit License:** The ability to edit a license in Advanced Reporting Suite is assigned to this role.
- **Reports:** All Report actions are added to this role.
- **Delete Reports:** The ability to delete reports is assigned to this role.
- **Duplicate Reports:** The ability to duplicate reports is assigned to this role.
- **Rename Reports:** The ability to rename reports is assigned to this role.
- **Report Designer:** The ability to access the Report Designer element of Advanced Reporting Suite is assigned to this role.
- **Roles:** All Role actions are assigned to this role.
- **Add Roles:** The ability to add roles is assigned to this role.
- **Delete Roles:** The ability to delete roles is assigned to this role.
- **Duplicate Roles:** The ability to duplicate roles is assigned to this role.
- **Edit Roles:** The ability to edit roles is assigned to this role.
- **Settings:** All Settings actions are assigned to this role.
- **Edit Settings:** The ability to edit the settings parameters of Advanced Reporting Suite is assigned to this role.
- **Users:** All User actions are added to this role.
- **Add Users:** The ability to add users is assigned to this role.



- **Approve Users:** The ability to approve users is assigned to this role.
- **Change User Passwords:** The ability to change user passwords is assigned to this role.
- **Delete Users:** The ability to delete users is assigned to this role.
- **Edit Users:** The ability to edit users is assigned to this role.
- **Reject Users:** The ability to reject users is assigned to this role.

## Defining a Role

To define a new Role on the system:

1. Select **Account > Roles** from the left-hand menu panel and click **Actions**.
2. Select **Add** from this menu to display the **Add Role** dialog.

In most scenarios, it is expected that you would want to create at least two different Roles to manage the day to day running of Advanced Reporting Suite.

- **Administrator:** This Role has full access to all areas of functionality within Advanced Reporting Suite. An alternative title could be Super-User.
- **Customer User:** This Role may be for the customer of a managed services provides that only allows the export of reports for their own company.

Other roles that you may wish to add for audit trail purposes include:

- **Specific Administration Role:** This may just be used to grant access to functions within **Advanced Reporting Suite** and does not get involved with any other aspect of producing or exporting reports.

**NOTE:** This additional Role is not covered in this guide but by setting up the two basic Roles you should be able to create additional Roles at a later point if required.

### Adding an Administrator Role:

1. In the **Role Name** parameter type **Administrator**.
2. Type a **Description** of **System Administrator**.
3. Ignore the **Default Role** check box (this role will be automatically become the Default Role as it is the only one defined) and instead tick the **User Profile Name** box that is currently defined under **All Users**.
4. Within the **Actions In Role** section of this display, click **All Actions**. All subsequent actions are now checked indicating that this role has full access to every function within Advanced Reporting Suite.

Your current display should now look like this:

Click **OK** to add the Administrator account to the Advanced Reporting Suite roles.

The main display now shows this Role defined and as being the default user.

ANDY ▾		
Name	Description	Default Role
Administrator	System Administrator	✓

### Adding a Customer User Role:

Use the following instructions to create a Customer User Role which only has access to exporting reports for a specific customer. This role can be used to allow customers of a Managed Services Provider, access to their own reports without having access to any other part of Advanced Reporting Suite running at the Managed Services Provider's Data Center.

In this example, this Role is also set as the default User Role for new users who are set-up on the system or who self-register.

1. Select **Account > Roles** from the left-hand menu panel and then click the **Actions** button to open the options pop-up menu. Select **Add** from this menu to display the Add Role dialog.
2. Type a **Role Name** of **System User**.
3. Enter a **Description** of **Customer User**.
4. Click the **Default Role** check box to indicate that this Role is now the Default Role for subsequent users.
5. Within the **Actions In Role** section of this display, click **Export Reports**. (Export Reports To PDF is automatically selected).

Your current display should now look like this:

Add Role

Name

System User

Description

Customer User

☒ Default Role

Users Assigned To Role

☒ All Users
 

Andy Bullivant

Actions In Role

☐ Duplicate Collections  
☐ Edit Collections  
☐ Data Collector  
☐ Edit Data Collector Parameter  
☐ Data Processor  
☐ Edit Data Processor Parameter  
☒ Export Reports  
☒ Export Reports To PDF  
☐ Groups  
☐ Add Groups  
☐ Delete Groups  
☐ Duplicate Groups

OK

Cancel

6. Click **OK** to add the System User account to the Advanced Reporting Suite Roles.


The main display now shows both the Administrator and System User Roles and the re-assignment of the Default Role to the System User account. Any Users that are set-up, or self-register on the system are now assigned this default Role.

Continue to add further Roles, with different levels of system access as, and if, required by your organization's operating environment.

## Editing Roles

Editing a Role allows you to amend the current attributes of an existing Role.

**NOTE:** You must have a suitable Role assigned to your user profile to be able to edit other roles.

1. Ensure that **Account > Roles** is selected in the left-hand menu panel and then click on the Role to be edited so that it is highlighted.
2. Click **Actions** and select  **Edit**. The **Edit Role** dialog is displayed. This contains the same parameters as the [Add Role](#) dialog.
3. Make amendments as required and click **OK** to confirm.


**WARNING:** Take care not to make any amendments to any existing Role, particularly the Administrator Role that may prevent you in being able to perform certain functions within Advanced Reporting Suite once the amendment has been confirmed.

## Duplicating Roles

Duplicating a Role allows you to copy the details of an existing Role into a newly named Role.

The duplicated Role will still need the Role Actions configuring to differentiate between this and the Role from which the duplication was made.


To duplicate a Role:

1. From the main display, select the **Administration** tab.
2. From the left-hand navigation panel, select **Accounts > Role**.
3. Select the **Role** to be duplicated.
4. Click **Actions** from the menu panel in the Administration tab heading panel.
5. From the drop-down menu, click  **Duplicate**. The **Duplicate Report** dialog is displayed.
6. Type the new Role **Name** and then amend other details if required. When the new Role details and actions have been configured, click **OK**.
7. The new Role is now added and displayed in the main display and Details display panel of Advanced Reporting Suite.

## Deleting Roles

Deleting a Role removes it permanently from the system.

**NOTE:** You must have a suitable Role assigned to your User profile to be able to delete existing Roles.

1. Select **Account > Roles** from the left-hand menu panel and then click on the Role to be deleted.
2. Click **Actions** and select  **Delete**.
3. When prompted click **OK** to confirm the deletion.

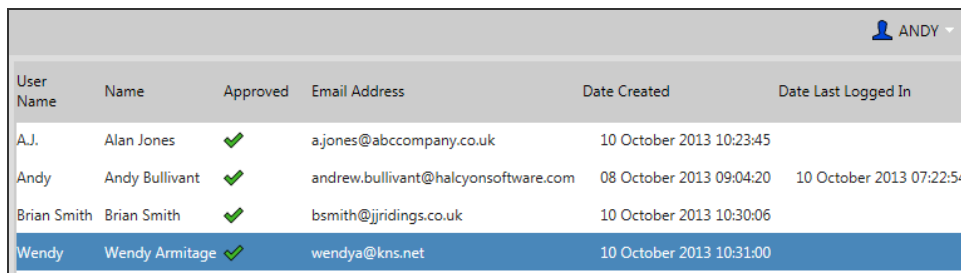
**WARNING:** Take care not to delete any existing Role, particularly the Administrator Role that may be required to access Advanced Reporting Suite, once the deletion has been confirmed.

# Users

A User is individual person who has their own log-in defined for Advanced Reporting Suite. Upon registering or being set-up, the User is assigned the default Role.

**TIP:** For audit trail purposes it is recommended that each user of Advanced Reporting Suite has their own individual log-in.

To view currently defined Users and their status, select **Account > Users**.



The screenshot shows a web interface for managing users. At the top right, there is a user profile icon and the name 'ANDY' with a dropdown arrow. Below this is a table with the following columns: 'User Name', 'Name', 'Approved', 'Email Address', 'Date Created', and 'Date Last Logged In'. The table contains four rows of user data.

User Name	Name	Approved	Email Address	Date Created	Date Last Logged In
A.J.	Alan Jones	✓	ajones@abccompany.co.uk	10 October 2013 10:23:45	
Andy	Andy Bullivant	✓	andrew.bullivant@halcyonsoftware.com	08 October 2013 09:04:20	10 October 2013 07:22:54
Brian Smith	Brian Smith	✓	bsmith@jjridings.co.uk	10 October 2013 10:30:06	
Wendy	Wendy Armitage	✓	wendya@kns.net	10 October 2013 10:31:00	

This display shows the following information:

## User Name

The user name assigned to this User.

## Name

The actual name of the User.

## Approved

Whether the User has been approved for use of Advanced Reporting Suite (after submitting a [Self Registration](#) request).

## Email Address

The email address of the User. This is required in order to send details of forgotten passwords.

## Date Created

The date on which the User account was created.

## Date Last Logged On

The date on which the user last accessed Advanced Reporting Suite.

## Adding a User

Use the following instructions to add a new User to the system. The new User is given the Default Role defined in **Account > Roles**.

There are three tabs to be completed when adding a new user to Advanced Reporting Suite: User, Roles and Groups.

### Defining the User details

1. Log-on as an Administrator or as a User that has a Role defined allowing the addition of users to Advanced Reporting Suite.
2. Select **Account > Users** from the left-hand menu panel and click **Actions**.
3. Click **Add**.
4. Enter a **User Name** by which this User is identified on Advanced Reporting Suite.
5. Type the User's actual **First Name**.
6. Type the User's actual **Last Name**.
7. Enter the User's **Email Address**. This is required so you can contact the User should they forget their password.
8. Enter a **Password** (minimum 6 characters) and confirm.
9. Click **OK** to create the User.

You are now ready to assign a Role to the new User.

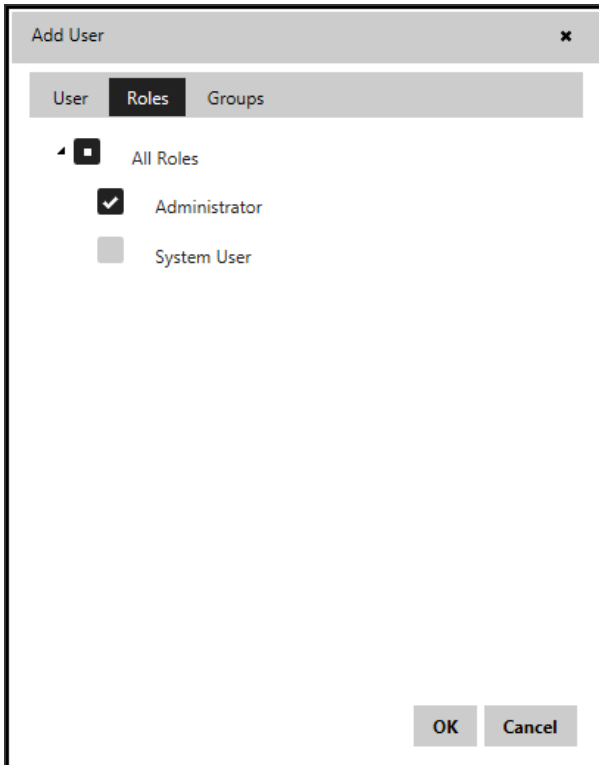
**TIP:** Role assignment is only required if the new User requires a different level of access to Advanced Reporting Suite other than that provided by the default Role settings.

**WARNING:** Users **MUST** be assigned to at least one Group in order to be able to use the Export Report functionality of Advanced Reporting Suite.



## Assigning a User to a Role

If the new User is to be assigned a different Role level other than the default Role, click the **Roles** tab.



1. Select the **Roles** tab and remove the default Role that is currently defined against the User.
2. Select the new **Role** to apply to the new User.

You are now ready to assign the new User to a Group.

**WARNING:** Users **MUST** be assigned to at least one Group in order to be able to use the Export Report functionality of Advanced Reporting Suite.

## Assigning a User to a Group

A User must be assigned to at least one Group in order to access the Export Report functionality of Advanced Reporting Suite. Users can be assigned to more than one Group simultaneously.

1. Select the **Groups** tab.
2. Select the **Group** to assign the User. To assign the User to every Group defined within Advanced Reporting Suite, select **All Groups**.

You have now completed the steps required to add a new User to the system.

Click **OK** to confirm the addition of the new User.

## Self Registration

If permitted by your configuration of Advanced Reporting Suite, Users can also self-register from the initial log-on display.

To do this, Users click **Register** and complete the same details as described in [Adding a User](#). They are automatically assigned the default Role.

Users that self-register are not approved and are unable to access the system until another User with an administrator role has edited the details and checked the User Approved option.

## Approving Users

If the User has been created by an Administrator account, they are automatically approved to use Advanced Reporting Suite within the limits defined by the assigned default Role.

If the user has self-registered, you must first approve them for use, assign a role (if different from the default role) and at least one Group to which the user is a member.


### Approving a User by granting Default Role access

1. Select **Account > Users** in the left-hand menu panel.
2. Click on the **User** to be approved.
3. Click **Actions**.
4. Select **Approve User**.
5. Click **OK** to approve the User with the Default Role setting.

### Approving a User that has self-registered

To approve a user that has self-registered, you must use the Edit User functionality.


**TIP:** You must have a role assigned to your User Profile that allows [Editing Users](#).

1. Select **Account > Users** in the left-hand menu panel.
2. Click on the **User** to be Edited.
3. Click **Actions**.
4. Click  **Edit**.
5. Click the **User Approved** check box.
6. Click **OK** to save the changes.

## Editing/Approving a User

Editing a User allows you to amend the current attributes of an existing User. The most common use of this functionality is to approve access for Users that have self-registered, providing your installation of Advanced Reporting Suite allows this.

You must have a suitable Role assigned to your user profile to be able to edit other User entries.

1. Select **Account > Users** from the left-hand menu panel and then click on the User to be edited so that the selection is highlighted.
2. Either click the **Actions** button or right-click in the main display panel to open the options pop-up menu. Select  **Edit** from this menu to display the **Edit User** dialog. This contains the same parameters as the **Add User** dialog with the addition of the User Approved check box.
3. To approve a self-registered User, click in the **User Approved** check box.
4. Make further amendments as required and click **OK** to confirm.

## Rejecting a User

There may be occasions where a User has self-registered and you do not want to give them access to Advanced Reporting Suite. In these cases you can reject their application. You can also temporarily remove access from a User if they are on extended leave or have switched duties within the organization. For permanent removal, use the Delete User option.

To reject a User:

1. Select **Account > Users** from the left-hand menu panel.
2. Click on the **User** to be rejected.
3. Click **Actions**.
4. Select **Reject User** to display the **Reject User** dialog.
5. Click **OK** to confirm the reject or remove authorization from the User.

## Deleting a User

Deleting a User permanently removes them from the system.

**TIP:** You must have a suitable Role assigned to your User profile to be able to delete existing Users.

To delete a User:

1. Select **Account > Users** from the left-hand menu panel.
2. Click on the **User** to be deleted.
3. Click **Actions**.
4. Select ☒ **Delete**.
5. Click **OK** to confirm the deletion.

**WARNING:** DO NOT DELETE THE DEFAULT ADMINISTRATOR USER ACCOUNT otherwise you will be unable to log back into the system or create a new User.

## Changing a User Password

Should a User forget their password or for reasons of security, you may need or want to change an active password.

To change a User password:

1. Select **Account > Users** from the left-hand menu panel.
2. Click on the User profile for which the password is to be changed.
3. Click **Actions**.
4. Select **Change Password** to open the **Change Password** dialog.
5. Enter and confirm the new password.
6. Click **OK** to confirm the change of password.

# Managing the Collection Parameters

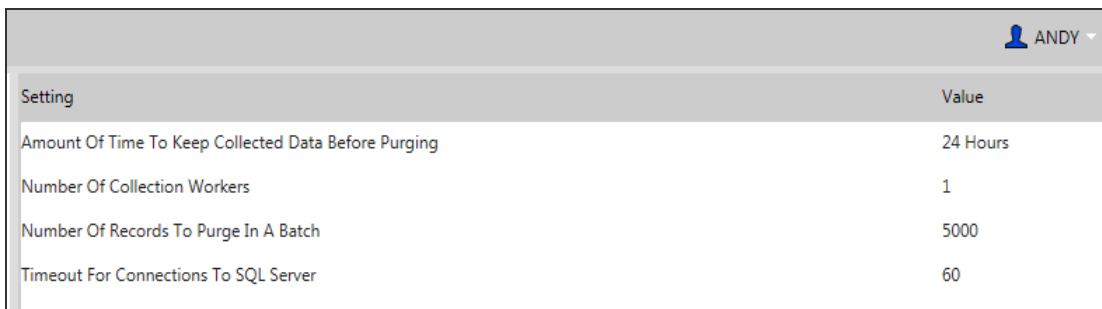
The Collection Parameters set the configuration for both the [Data Collector](#) and [Data Processor](#). These parameters control the way in which the performance data is retrieved, handled and kept for reporting purposes.

## Data Collector Parameters

To set Data Collector Parameters:

1. Select **Settings>Data Collector** from the left-hand menu panel.

The current Data Collector parameter configuration is displayed in the main panel of Advanced Reporting Suite.



Setting	Value
Amount Of Time To Keep Collected Data Before Purging	24 Hours
Number Of Collection Workers	1
Number Of Records To Purge In A Batch	5000
Timeout For Connections To SQL Server	60

The following parameters are available for Data Collection:

### Amount Of Time To Keep Collected Data Before Purging

Determines the length of time that the collected data is held in the 'staging' area.

This area is the location from where the Data Processor picks up the performance data so it can then run it through the Data Warehouse. Once this process is complete, it is then visible to the report generator.

As long as you set the Data Processor Interval to check for new records on a more frequent basis than you have the value to which this parameter is set, no performance data is ever lost. However, you may wish to keep the data for longer in case an issue arises and you need to check back on the data that was collected.

The default setting for this field is 24 hours, although when editing it is possible to specify a time period in Minutes, Hours, Days, Months or Years.

**WARNING:** Storing performance data for long periods of time may have an impact on your disk space, especially if collecting data from multiple devices.

## Number Of Collection Workers

Determines the number of workers used to collect the performance data from the defined devices.

A 'worker' is a small program used to retrieve the required information. As a general rule, the more devices from which you collect performance data, the more workers you need. This is because a single worker program may get overrun when trying to collect performance data from a large volume of devices on a frequent basis.

We recommend using a ratio of 1 worker to every 3 devices.

## Number Of Records To Purge In A Batch

Defines the maximum number of old records that are removed in a batch when the purge action is invoked. (See [Amount Of Time To Keep Collected Data Before Purging](#)).

Therefore, if there are 15,000 records, there are 3 batch processes, that run one after another, each of which removes 5,000 records. This is designed to prevent any timeout issues when trying to process excessively large volumes of data in a single attempt.

The default setting for this parameter is 5,000 records.


## Timeout For Connections To SQL Server

Defines the time in which the Data Collector needs to connect to the SQL Server database prior to a timeout occurring.

The default time is 60 seconds.

## Editing the Data Collector Parameters

In most environments the default Data Collector parameters will suffice. If you need to edit one of more of the parameters, do the following:

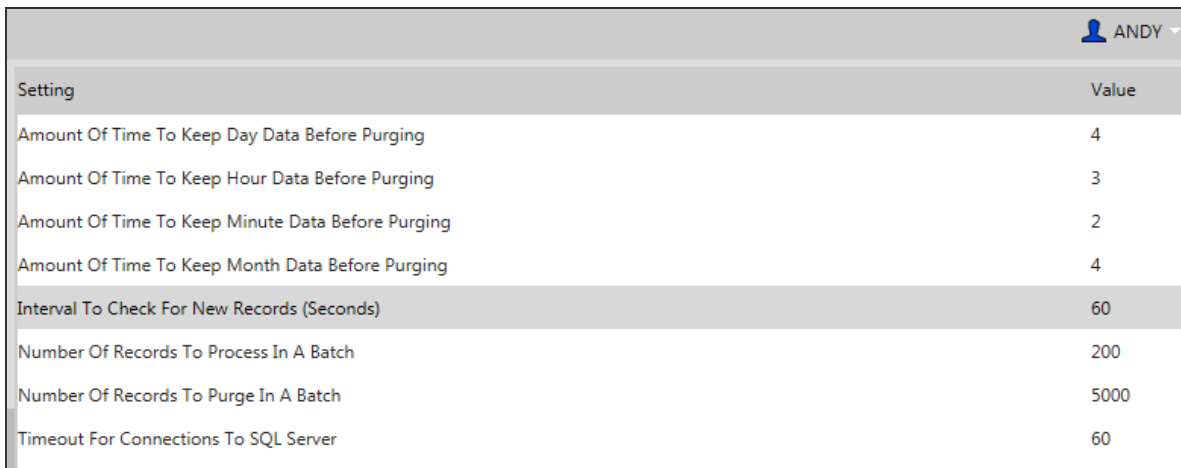
1. Select **Settings > Data Collector** from the left-hand menu panel
2. Click on the individual parameter that you want to change.
3. Click **Actions** and select  **Edit** to open the **Edit** dialog.
4. Amend the current setting as required.
5. Click **OK** to confirm.

# Data Processor Parameters

To set Data Processor Parameters:

1. Select **Settings > Data Processor** from the left-hand menu panel.

The current Data Processor parameter configuration is displayed in the main panel of Advanced Reporting Suite.



Setting	Value
Amount Of Time To Keep Day Data Before Purging	4
Amount Of Time To Keep Hour Data Before Purging	3
Amount Of Time To Keep Minute Data Before Purging	2
Amount Of Time To Keep Month Data Before Purging	4
Interval To Check For New Records (Seconds)	60
Number Of Records To Process In A Batch	200
Number Of Records To Purge In A Batch	5000
Timeout For Connections To SQL Server	60

**WARNING:** When setting the following parameters, please remember that the longer the time period that you keep the performance data records, the more storage space that is required.

Also note that once data has been purged, it is no longer retrievable.

The following parameters are available for Data Processing:

## Amount Of Time To Keep Day Data Before Purging

Defines the period of time over which 'Daily' performance data records are kept before removal from the Data Warehouse.

The default setting for this parameter is 1 Year.

When editing this parameter you are able to set a time period of Minutes, Hours, Days, Months or Years.

## Amount of Time To Keep Hour Data Before Purging

Defines the period of time over which 'Hourly' performance data records are kept before removal from the Data Warehouse.

The default setting for this parameter is 3 Months.

When editing this parameter you are able to set a time period of Minutes, Hours, Days, Months or Years.

### Amount Of Time To Keep Minute Data Before Purging

Defines the period of time over which 'Minute' performance data records are kept before removal from the Data Warehouse.

The default setting for this parameter is 7 Days.

When editing this parameter you are able to set a time period of Minutes, Hours, Days, Months or Years.

### Amount Of Time To Keep Month Data Before Purging

Defines the period of time over which 'Monthly' performance data records are kept before removal from the Data Warehouse.

The default setting for this parameter is 5 Years.

When editing this parameter you are able to set a time period of Minutes, Hours, Days, Months or Years.

### Interval To Check For New Records (Seconds)

Defines the frequency with which the Data Processor checks for new performance data records appearing in the 'staging' area once they have been retrieved by the Data Collector.

The default setting for this parameter is 60 seconds.

**NOTE:** This setting should not be confused with the [Collection Interval](#) setting which is the frequency with which performance data is retrieved from the actual IBM i, Windows, AIX and Linux devices.

### Number Of Records To Process In A Batch

Defines the number of performance data records that the Data Processor transfers from within the 'staging' area to the Data Warehouse in a single batch. The greater this figure, the more time is required to process the data. Processing continues in batches of this size until all of the performance data has been transferred. The Data Processor then waits until the next scheduled check (defined in the [Interval To Check For New Records](#) parameter), before beginning the collection process again.



The default setting for this parameter is 200 records.

**NOTE:** Upon initial start-up (or when adding a new collection device) there may be a large number of records to process due to the amount of performance data to be downloaded from the IBM i, Windows, AIX and Linux devices.

## Number Of Records To Purge In A Batch

Defines the number of records removed from the Data Warehouse in a single batch when using any of the four purging options (Minute, Hour, Day and Month) available within the Data Processor Parameter settings. The purging process continues in batches of the stated size until all records are removed in accordance with the associated time period setting for each option.

The default setting for this parameter is 5000 records.


## Timeout For Connections To SQL Server

Defines the time in which the Data Processor needs to connect to the SQL Server database prior to a timeout occurring.

The default time is 60 seconds.

## Editing the Data Processor Parameters

In most environments the default Data Processor parameters will suffice. If you need to edit one of more of the parameters, do the following:

1. Select **Settings > Data Processor** from the left-hand menu panel.
2. Click on the individual parameter that you want to change.
3. Click **Actions** and select  **Edit** to open the **Edit** dialog.
4. Amend the current setting as required.
5. Click **OK** to confirm.

# Application Settings

Application settings control the self-registration and SMTP settings of Advanced Reporting Suite.

The following parameters are available.

## Allow Self Registration

When set to ☒ (the shipped default), this setting allows Users to self-register from the log-on dialog, displayed when Advanced Reporting Suite is first opened.

**NOTE:** Users who self-register are unable to access Advanced Reporting Suite until they have been approved by an administrator or a User whose role allows the approval of self-registrations.

Changing the default setting removes the **Register** button from the log-on dialog so that only Users who have previously been set-up by an administrator have access to Advanced Reporting Suite.

### To change the current setting:

1. Click on **Allow Users To Self-Register**.
2. Right-click and select **Edit**.
3. Change the current setting and click **OK** to confirm.

## SMTP Settings

The following settings are required by Advanced Reporting Suite when sending reminders to Users who have forgotten their access passwords. You may need the assistance of your network administrator to complete these settings.

### To change any of these settings:

1. Click on the required entry so that it is highlighted.
2. Right-click and select **Edit**.
3. Change the current setting and click **OK** to confirm.

## SMTP Password

Specifies the password required in order to access the SMTP Server from where emails are sent. Depending on how the network has been configured, you may also be required to enter the domain/username details in order for access to be granted.

## SMTP Port

Specifies the port number on which the SMTP Server communicates when sending emails.

## SMTP Sender Email Address

Enter the email address from which 'Forgotten Password' emails are sent from the SMTP Server. The default entry is: `advanced@reportingsuite.com`

## SMTP Sender Name

Enter the sender name from which 'Forgotten Password' emails are sent. The default entry is: Advanced Reporting Suite.

## SMTP Server

Enter the IP Address of the SMTP Server from which 'Forgotten Password' emails are sent. The default entry is `127.0.0.1`.

## SMTP Use SSL or TLS Encryption

Specifies whether SMTP uses SSL or TLS Encryption. The default setting is no encryption.

**NOTE:** There is no separate setting for SSL and TLS. Enabling this option simply specifies that one or the other encryption protocols is used.

## SMTP User

Enter the name of the User required to access the SMTP server from which **Forgotten Password** emails are sent. This is the User associated with the SMTP Password that was entered earlier in this section.

# Plugins

Plugins are used to set the system default settings for the Collection parameters. These are the values that are automatically specified when a new Collection is added to Advanced Reporting Suite.

Each Operating System has a pre-defined plugin and additionally, if Enterprise Console Reporting has been licensed for use with Advanced Reporting Suite a separate plugin is also available.

**TIP:** The plugin values provide system default settings for each new collection that is added. They can be overridden at Collection level on an individual basis.

## Editing Plugin Values

Each set of Operating System plugins comes with shipped value. To change these values the settings need to be edited.

To edit an existing plugin value:

1. Select the **Administration** tab.
2. From the left-hand menu panel open the plugin for which the value is to be changed.
3. Do **one** of the following:
  - Right-click on the value and select **Edit**.
  - Double-click directly on the value.
  - Click on the value, then click **Actions > Edit**.
4. Amend the value and then click **OK** to confirm.

The following plugins are available:

## IBM i Plugins

The following parameters are available when setting system default values for the IBM i operating platform.

### Collection Interval (seconds)


The initial default setting is 60 seconds. Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

### Daily Collection Time (Remote)

Disk data collection is normally made at midnight. Leave this field set to 00:00:00 and the parameter is automatically configured from the setting in the [Time Zone](#) parameter set when configuring the Device Details. The time setting applied is shown in the main display panel of Advanced Reporting Suite once the Collection for the device has been added.

**NOTE:** This parameter is only for IBM i customers using Halcyon Disk Space Manager on the device being configured.

### Hold Collection

The default setting is ☒ **No**. All collections are retrieved in line with the period defined in the **Collection Interval** parameter. Change this setting to ☐ **Yes** to prevent any further data collections being retrieved until the setting is changed back to ☒. The  **Hold** symbol is displayed against this device in the Status column of the main display of Advanced Reporting Suite.


## Windows Plugins

The following parameters are available when setting system default values for the IBM i operating platform collections.

## Collection Interval (seconds)

The initial default setting is 60 seconds. Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

## Hold Collection

The default setting is ☒ **No**. All collections are retrieved in line with the period defined in the **Collection Interval** parameter. Change this setting to ☐ **Yes** to prevent any further data collections being retrieved until the setting is changed back to ☒. The  symbol is displayed against this device in the Status column of the main display of Advanced Reporting Suite.


## Unix Plugins (AIX & Linux)

The following parameters are available when setting system default values for the IBM i operating platform collections.

## Collection Interval (seconds)

The initial default setting is 60 seconds. Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

## Hold Collection

The default setting is ☒ **No**. All collections are retrieved in line with the period defined in the **Collection Interval** parameter. Change this setting to ☐ **Yes** to prevent any further data collections being retrieved until the setting is changed back to ☒. The  symbol is displayed against this device in the Status column of the main display of Advanced Reporting Suite.

## Enterprise Console Plugins

This plugin is only available if Enterprise Console Reporting has been licensed for this instance of Advanced Reporting Suite.

The following parameters are available when setting system default values for Enterprise Console Reporting collections.


### Collect Top X Alerts

Sets the value of how many alerts to retrieve on each collection interval (where X represents the number). The default setting value is 10. This can be increased but only to a maximum value of 30. This is to prevent excessive amounts of data affecting performance.

### Collection Interval (seconds)

The initial default setting is 60 seconds. Increasing the time period means that more performance data is retrieved on a less frequent basis, while reducing it means that less data is retrieved more frequently.

### Hold Collection

The default setting is ☒ **No**. All collections are retrieved in line with the period defined in the **Collection Interval** parameter. Change this setting to ☐ **Yes** to prevent any further data collections being retrieved until the setting is changed back to ☒. The  **Hold** symbol is displayed against this device in the Status column of the main display of Advanced Reporting Suite.

### SQL Connection Timeout (seconds)

The default setting is 60. This is the maximum time for a connection to be made between the collection and SQL Server

### SQL Login ID

The default setting is blank. This is the default user profile needed to gain access to the SQL server from which the Enterprise Console data is accessed.

**WARNING:** Without this setting defined, Enterprise Console data will not be visible within Advanced Reporting Suite.

## SQL Password

The default setting is blank. This is the password associated with the default user profile entered in the previous field. For security reasons the password is hidden from view.

**WARNING:** Without this setting defined, Enterprise Console data will not be visible within Advanced Reporting Suite.

## SQL Server

The default setting is localhost\HALCYON. Use this value to specify the name of The SQL Server on which the database instance is installed.

**WARNING:** Without this setting properly defined, Enterprise Console data will not be visible within Advanced Reporting Suite

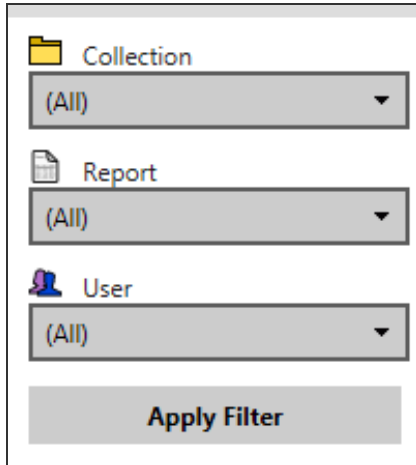
## SQL Windows Authentication

The default setting is ☒ **No**. Change this setting to ☐ **Yes** if the default method of authentication to the SQL Server is via Windows authentication.



# Filtering

Filtering is used within Advanced Reporting Suite to handle large volumes of system data into easily manageable portions of information that can then be viewed on screen.



Within the Administration area of Advanced Reporting Suite, filtering views can be applied using the following rules:

- **With Group selected:** Allows filtering by Collection, Report and User
- **With Collections selected:** Allows filtering by Group only
- **With Reports selected:** Allows filtering by Group only
- **With Roles selected:** Allows filtering by User only
- **With Users selected:** No filtering allowed

Filters become available as menu items are selected. For example, when the Groups menu option is selected, you can apply the Collections Filter. Selecting a Collections device here allows you to filter by Reports and Users specific to the selected device.

To apply a filter, use the drop-down choice lists in the hierarchical structure that you want to use as the basis of the filter.

**EXAMPLE:** To filter by **Reports** in a specific **Collection**, first select the **Collection** from the **Collection Filter**. Only **Reports** that are assigned to this Collection are then available for selection in the **Reports Filter**.

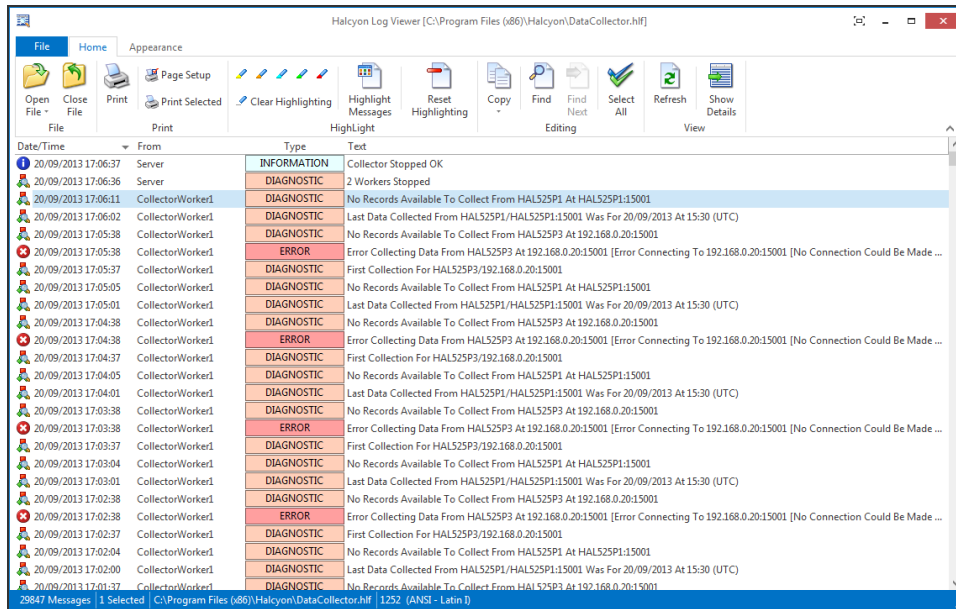
When the filter structure has been defined, click **Apply Filter**.

All results that match the definition are returned in the main display panel of Advanced Reporting Suite.

# Log File Viewer

Advanced Reporting Suite also installs a Log File Viewer program so that you can view the contents of the DataCollector.hlf and DataProcessor.hlf log files.

By default, these log files are stored in C:\Program Files\Halcyon\.



## Opening the Log Viewer

By default, the Log File Viewer application is installed by default in the following directory:

C:\Program Files\Halcyon\Log Viewer\


**NOTE:** This directory will be different if you chose a different file path at the point of installing Advanced Reporting Suite.

We recommend creating a shortcut on your desktop in order to obtain quick access to this program.

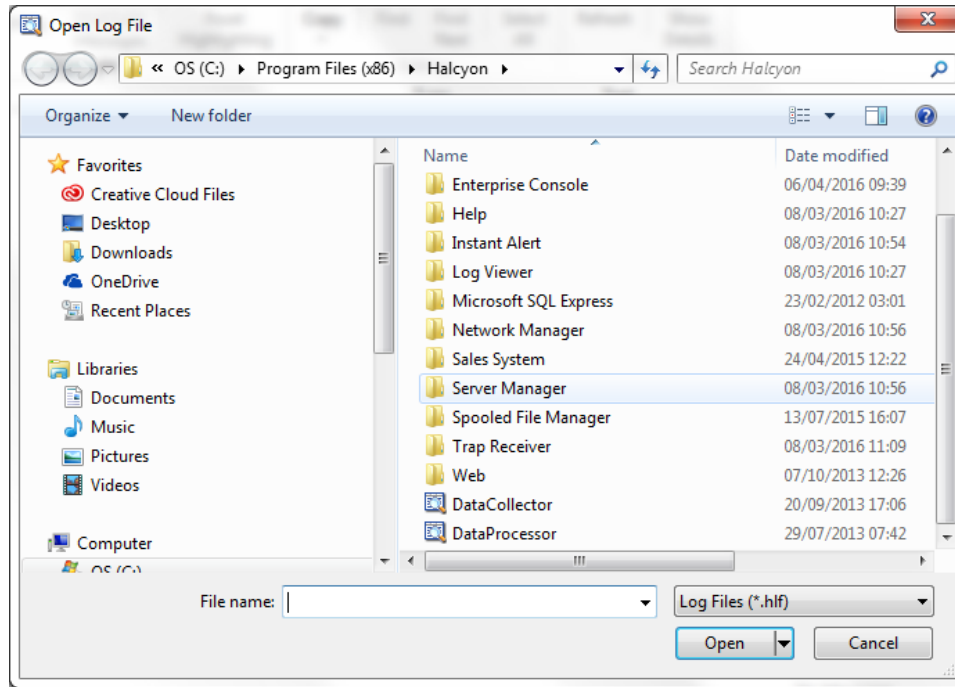
**NOTE:** Please refer to your Windows documentation or your system administrator for instructions on how to complete this task.

## Accessing the Log Files

Upon opening the Log File Viewer it shows as a blank display.

Click the  **Open File** icon to display the **Open Log File** dialog.

This dialog defaults to the directory C:\Program Files\Halcyon\ where the DataCollector.hlf and DataProcessor.hlf files are stored (providing the default installation configuration was selected).

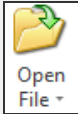
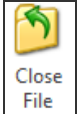


Click on either the **DataCollector** or **DataProcessor** file to select it and then click **Open**.

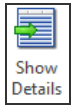
The contents of the selected log file are now displayed in the Log File Viewer.

## Using the Log File Viewer

The following options are available when using the Log File Viewer in Advanced Reporting Suite.

Icon	Function
	Click the <b>Open File</b> icon to open the <b>Open Log File</b> dialog. Click the small arrow in the bottom right corner to display a list of the most recently viewed log files. Selection from either source displays the newly selected log file over any information currently displayed.
	Click the <b>Close File</b> icon to close the current log file from view.

 Print	Click the <b>Print</b> icon to produce a preview report of the log file to be printed. <b>Warning!</b> This report may be very large depending on the number of log files contained in the selected file. Use Print Selected to print a small report based on log file entries that you have specifically highlighted.
 Page Setup	Click the <b>Page Setup</b> icon to be able to set the page properties, such as paper size and orientation of any reports produced from within this session of Log File Viewer.
 Print Selected	Click the <b>Print Selected</b> icon to produce a preview report of the log file entries that have been highlighted within the Log File Viewer display.
 Clear Highlighting	Click on a highlighter to indicate the color in which selected messages are highlighted. Selecting <b>Clear Highlighting</b> means that log file entries are still selected but the selected entries are not directly visible from the Log File Viewer display.
 Highlight Messages	Click the <b>Highlight Messages</b> icon to open the <b>Highlight Messages</b> dialog. This allows you to specify the color in which messages containing a specified text entry are highlighted. Case-sensitive ruling can also be applied.
 Reset Highlighting	Click the <b>Reset Highlighting</b> icon to remove any existing highlighting rules from the displayed log file.
 Copy	Click the <b>Copy</b> icon to copy the selected entry to the Windows clipboard in log entry format.  Click the down arrow under the icon to be able to copy the entry as it is, as simple text or as XML.
 Find	Click the <b>Find</b> icon to open a secondary dialog into which you can enter the text that you want to find in a log file entry. There is no case-sensitive option.
 Find Next	Once the first 'Find' has been initiated, click the <b>Find Next</b> icon to continue searching the file for other entries that may contain the specified text. The search is always descending from the top of the display.
 Select All	Click the <b>Select All</b> icon to select all log file entries for copying, highlighting and so on.
 Refresh	Click the <b>Refresh</b> icon to update the display with any new log file entries that may have been posted since this Log File Viewer session was started.



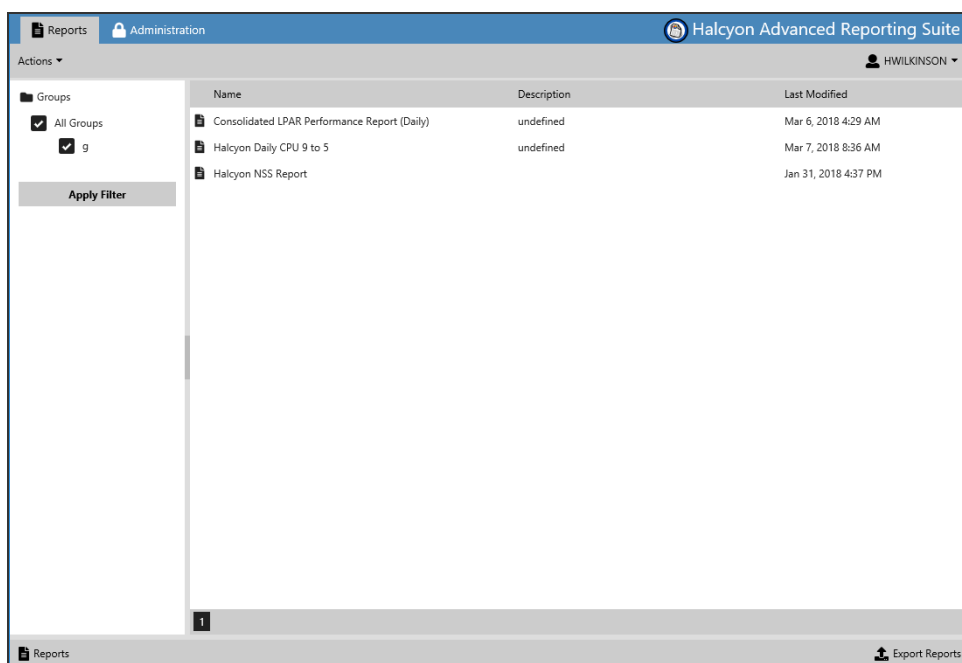
Select an entry and click the **Show Details** icon to display the full details associated with the selected entry (if further details are available).

# Reports

Reports are used in Advanced Reporting Suite to display the results of the Collections for each Group. When the Reports option is selected, any Reports that have already been configured are displayed.

**NOTE:** On first starting Advanced Reporting Suite using the Internet Browser, the Reports display is blank unless you have saved the standard Halcyon report templates to the database using the Report Designer.

The Reports section allows you to export report data, in PDF format, using templates that you have previously created and saved using the Report Designer element of Advanced Reporting Suite. If you have not yet created any report templates or saved them to the database, this display is blank. See [Saving Halcyon Report Templates to the Database](#).



By default, all Reports for all Groups are displayed. See [Report Filtering](#) for help on restricting the content on this display.

To view your currently available Reports, select the **Reports** tab at the top of the main Advanced Reporting Suite display.

# Report Templates

Advanced Reporting Suite comes pre-supplied with a set of default report templates to cover the commonest scenarios on which you want to report.

The report templates are available from within the Report Designer component of Advanced Reporting Suite and need to [saved to the Web GUI component](#) before they are available for use.

The following report templates are available. The descriptions all assume that the template defaults are not changed prior to export.

## General Reports

The following report templates cover general usage reports.

### Alert Summary By Device Group

This report template shows the details of all alerts within the selected date range broken down by Device Group and contains the following information:

- **Device Group Name:** The name of each Device Group.
- **Total Alerts:** The total number of alerts received by each Device Group within the specified date range.
- **Total Closed:** The total number of alerts closed within each Device Group within the specified date range.
- **Total Replies:** The total number of alerts to which replies were sent within each Device Group within the specified date range.
- **Total Acknowledged:** The total number of alerts that were acknowledged within each Device Group within the specified date range.

See an example report [here](#).

### Alert Summary By Device Type

This report template shows the details of all alerts within the selected date range broken down by Device Type and contains the following information:

- **Device Type Name:** The name of each Device Type.
- **Total Alerts:** The total number of alerts received by each Device Type within the specified date range.

- **Total Closed:** The total number of alerts closed within each Device Type within the specified date range.
- **Total Replies:** The total number of alerts to which replies were sent within each Device Type within the specified date range.
- **Total Acknowledged:** The total number of alerts that were acknowledged within each Device Type within the specified date range.

See an example report [here](#).

### Alert Summary By Platform

This report template shows the details of all alerts within the selected date range broken down by Operating Platform and contains the following information:

- **Operating Platform Name:** The name of each Operating Platform.
- **Total Alerts:** The total number of alerts received by each Operating Platform within the specified date range.
- **Total Closed:** The total number of alerts closed within each Operating Platform within the specified date range.
- **Total Replies:** The total number of alerts to which replies were sent within each Operating Platform within the specified date range.
- **Total Acknowledged:** The total number of alerts that were acknowledged within each Operating Platform within the specified date range.

See an example report [here](#).

### Alert Summary By Product

This report template shows the details of all alerts within the selected date range broken down by Product and contains the following information:

- **Product Name:** The name of each Product.
- **Total Alerts:** The total number of alerts received by each Product within the specified date range.
- **Total Closed:** The total number of alerts closed within each Product within the specified date range.
- **Total Replies:** The total number of alerts to which replies were sent within each Product within the specified date range.



- **Total Acknowledged:** The total number of alerts that were acknowledged within each Product within the specified date range.

See an example report [here](#).

## Alert Summary By Source

This report template shows the details of all alerts within the selected date range broken down by Source Type and contains the following information:

- **Source Name:** The name of each Source Type.
- **Total Alerts:** The total number of alerts received by each Source Type within the specified date range.
- **Total Closed:** The total number of alerts closed within each Source Type within the specified date range.
- **Total Replies:** The total number of alerts to which replies were sent within each Source Type within the specified date range.
- **Total Acknowledged:** The total number of alerts that were acknowledged within each Source Type within the specified date range.

See an example report [here](#).

## Daily User Summary By Device Group

This report shows a daily summary of alert activity split by Device Group and contains the following information:

- **Date:** The date for which the report applies.
- **Product:** The name of the product that raised the alert.
- **Source:** The name of the Source Type raised the alert.
- **Acknowledged:** The number of alerts acknowledged in the Device Group on this day.
- **Closed:** The number of alerts closed in the Device Group on the day.
- **Comments:** The number of comments left against alerts in the Device Group on this day.
- **Replies:** The number of alerts that were replied to in the Device group on this day.

See an example report [here](#).

## Daily User Summary By Platform

This report shows a daily summary of alert activity split by Operating Platform and contains the following information:

- **Date:** The date for which the report applies.
- **Product:** The name of the product that raised the alert.
- **Source:** The name of the Source Type raised the alert.
- **Acknowledged:** The number of alerts acknowledged in the Device Group on this day.
- **Closed:** The number of alerts closed in the Device Group on the day.
- **Comments:** The number of comments left against alerts in the Device Group on this day.
- **Replies:** The number of alerts that were replied to in the Device group on this day.

See an example report [here](#).

## Daily User Summary By User

This report shows a daily summary of alert activity split by Operating Platform and contains the following information:

- **Date:** The date for which the report applies.
- **Product:** The name of the product that raised the alert.
- **Source:** The name of the Source Type raised the alert.
- **Acknowledged:** The number of alerts acknowledged in the Device Group on this day.
- **Closed:** The number of alerts closed in the Device Group on the day.
- **Comments:** The number of comments left against alerts in the Device Group on this day.
- **Replies:** The number of alerts that were replied to in the Device group on this day.

See an example report [here](#).

## Halcyon Daily CPU 9 to 5

This report shows a daily summary of CPU activity undertaken between the common working hours of 9a.m. and 5p.m on a system by system. This report shows:

- **The Average CPU Usage %** (expressed as a figure)
- **The Average CPU Usage by Hour** (expressed in graphical format)
- **The CPU % by Hour** (expressed in Table format)

See an example report [here](#).

## Halcyon Daily CPU by Hour

This report shows a daily summary of CPU activity over a 24 hour period on a system by system basis. This report shows:

- **The Average CPU Usage %** (expressed as a figure)
- **The Average CPU Usage by Hour** (expressed in graphical format)
- **The CPU % by Hour** (expressed in Table format)

See an example report [here](#).

## Halcyon Monthly Service Report (Annual)

This report shows detailed operational information in tabular format and monthly Performance Statistics in both graphical and tabular format and includes the following:

In Tabular Format:

- **System name:** The name of the IBM i Device for which the report is generated.
- **CPU Utilization:** Displays the Average CPU %, Max and Min CPU % values, used over the month.
- **Disk Utilization:** Displays the Average System ASP %, Max and Min System ASP% values, used over the month.
- **Response:** Displays the Average Response Time, Max and Min Response Time values, recorded over the month.
- **Active Jobs:** Displays the Average Active Jobs, Max and Min Active Job values, recorded over the month.

- **Total Batch Jobs:** Displays the Average Total Batch Jobs, Max and Min Total Batch Job values, recorded over the month.
- **User DB Faults/Sec:** Displays the Average DB Faults/Sec, Max and Min DB Faults/Sec values, recorded over the month.

In Graphical Format:

CPU Utilization: Displays the CPU load as a percentage value by month.

- **Disk Utilization:** Displays the Disk load as a percentage value by month.
- **Response:** Displays the Response Time in milliseconds by month.
- **Active Jobs:** Displays the Number of Active Jobs by month.
- **Total Batch Jobs:** Displays the Total Number of Jobs by month.
- **User DB Faults/Sec:** Displays the number of User Database Faults recorded per Second by month.

In Tabular Format:

Displays Performance Statistics for:

- **CPU%**
- **ASP%**
- **Active Jobs**
- **Total Batch Jobs**
- **Response**

See an example report [here](#).

## Halcyon Monthly Service Report (Daily)

This report shows detailed operational information in tabular format and daily Performance Statistics in both graphical and tabular format and includes the following:

In Tabular Format:

- **System name:** The name of the IBM i Device for which the report is generated.
- **CPU Utilization:** Displays the Average CPU %, Max and Min CPU % values, used over each day.

- **Disk Utilization:** Displays the Average System ASP %, Max and Min System ASP% values, used over each day.
- **Response:** Displays the Average Response Time, Max and Min Response Time values, recorded over each day.
- **Active Jobs:** Displays the Average Active Jobs, Max and Min Active Job values, recorded over each day.
- **Total Batch Jobs:** Displays the Average Total Batch Jobs, Max and Min Total Batch Job values, recorded over each day.
- **User DB Faults/Sec:** Displays the Average DB Faults/Sec, Max and Min DB Faults/Sec values, recorded over each day.

In Graphical Format:

CPU Utilization: Displays the CPU load as a percentage value by day.

- **Disk Utilization:** Displays the Disk load as a percentage value by day.
- **Response:** Displays the Response Time in milliseconds by day.
- **Active Jobs:** Displays the Number of Active Jobs by day.
- **Total Batch Jobs:** Displays the Total Number of Jobs by day.
- **User DB Faults/Sec:** Displays the number of User Database Faults recorded per Second by day.

In Tabular Format:

Displays Performance Statistics for:

- CPU%
- ASP%
- Active Jobs
- Total Batch Jobs
- Response

See an example report [here](#).

## Halcyon NSS Report

This report shows detailed operational information in tabular format and Performance Statistics in both graphical and tabular format and includes the following:

- **System Name:** The name of the device.
- **Average CPU Load %:** Displays the Average CPU Load, over the specified time period, as a percentage value.
- **Average Page File Used %:** Displays the Average Page File Used, over the specified time period, as a percentage value.
- **Max CPU Load %:** Displays the Max CPU Load, over the specified time period, as a percentage value.
- **Max Page File Used %:** Displays the Max Page File Used, over the specified time period, as a percentage value.
- **CPU Load:** Shows the CPU load, over the specified time period, as a percentage value of Processor Time and displayed in graphical format.
- **Disk Usage:** Shows the Disk Usage, over the specified time period, as a percentage value of Used Space and displayed in a graphical format.
- **Page File:** Shows the Page File Usage, over the specified time period, as a percentage value and displayed in a graphical format.

See an example report [here](#).

## Monthly Alert Summary By Device Group

This report shows a summary of alerts, split by Device Group. The following information is displayed:

### Summary

Displays the **Total Number of Alerts**, the **Total Number of Alerts Closed**, **Total Number of Replies** and **Total Number of Alerts Acknowledged**.

### By Device Group

For each Device Group the following information is displayed:

- **Date:** The month to which the report relates.
- **Device:** The name of each device contained within the Device Group.
- **Product:** The name of the product that raised the alerts.
- **Total Alerts:** The total number of alerts raised by device and product.
- **Closed:** Displays data for the total number of alerts closed per device and product and the average number of minutes the alerts were open prior to being closed.

- **Replies:** Displays data for the total number of alerts replied to per device and product and the average number of minutes the alerts were open prior to being replied to.
- **Acknowledged:** Displays data for the total number of alerts acknowledged per device and product and the average number of minutes the alerts were open prior to being acknowledged.

See an example report [here](#).

## Monthly Alert Summary By Device Type

This report shows a summary of alerts, split by Device Type. The following information is displayed:

### Summary

Displays the **Total Number of Alerts**, the **Total Number of Alerts Closed**, **Total Number of Replies** and **Total Number of Alerts Acknowledged**.

### By Device Type

For each Device Type the following information is displayed:

- **Date:** The month to which the report relates.
- **Device:** The name of each device contained within the Device Type.
- **Product:** The name of the product that raised the alerts.
- **Total Alerts:** The total number of alerts raised by device and product.
- **Closed:** Displays data for the total number of alerts closed per device and product and the average number of minutes the alerts were open prior to being closed.
- **Replies:** Displays data for the total number of alerts replied to per device and product and the average number of minutes the alerts were open prior to being replied to.
- **Acknowledged:** Displays data for the total number of alerts acknowledged per device and product and the average number of minutes the alerts were open prior to being acknowledged.

See an example report [here](#).

## Monthly Alert Summary By Platform

This report shows a summary of alerts, split by Platform. The following information is displayed:

### Summary

Displays the **Total Number of Alerts**, the **Total Number of Alerts Closed**, **Total Number of Replies** and **Total Number of Alerts Acknowledged**.

### By Platform

For each Operating Platform the following information is displayed:

- **Date:** The month to which the report relates.
- **Device:** The name of each device contained within the Operating Platform.
- **Product:** The name of the product that raised the alerts.
- **Total Alerts:** The total number of alerts raised by device and product.
- **Closed:** Displays data for the total number of alerts closed per device and product and the average number of minutes the alerts were open prior to being closed.
- **Replies:** Displays data for the total number of alerts replied to per device and product and the average number of minutes the alerts were open prior to being replied to.
- **Acknowledged:** Displays data for the total number of alerts acknowledged per device and product and the average number of minutes the alerts were open prior to being acknowledged.

See an example report [here](#).

## Monthly User Summary By Platform

This report shows a summary of alerts, split by User and Platform. The following information is displayed:

### Summary

Displays the **Total Number of Alerts Acknowledged**, **Total Number of Alerts Closed**, **Total Number of Comments** and **Total Number of Replies**.



## By Platform

For each Platform the following information is displayed:

- **Date:** The month to which the report relates.
- **User:** The name of the user on the platform to which the alert summary relates.
- **Device:** The name of each device contained within the Operating Platform.
- **Product:** The name of the product that raised the alerts.
- **Acknowledged:** Displays data for the total number of acknowledgments raised by this user per device and product.
- **Closed:** Displays data for the total number of alerts closed by this user per device and product.
- **Comments:** Displays data for the total number of alerts to which comments were applied per device and product.
- **Replies:** Displays data for the total number of alerts replied to per device and product.

See an example report [here](#).

## Top 10 Alerts By Device Group

This report shows the commonest 10 alerts received by the Enterprise Console during the specified time period, split by Device Group.

- **System Name:** The name of the device for which this report is generated.
- **Address:** The Host name or IP Address of the device.
- **Port:** The port number on which the device is connected in Advanced Reporting Suite for data collection.
- **Total Alerts:** Displays the total number of alerts received for the entry in this report.
- **Date:** The date on which the latest alert was received.
- **Device Type:** The type of device that raised the alert.
- **Device Category:** The device category to which the device belongs.
- **Alert Text:** Displays the actual text of the alert.
- **Product:** The product that raised the alert.
- **Source:** The product source that raised the alert.

See an example report [here](#).

## Top 10 Alerts By Device

This report shows the commonest 10 alerts received by the Enterprise Console during the specified time period, split by Device.

- **Platform:** The name of the Operating Platform on which the device
- **System Name:** The name of the device for which this report is generated.
- **Address:** The Host name or IP Address of the device.
- **Port:** The port number on which the device is connected in Advanced Reporting Suite for data collection.
- **Total Alerts:** Displays the total number of alerts received for the entry in this report.
- **Date:** The date on which the latest alert was received.
- **Alert Text:** Displays the actual text of the alert.
- **Product:** The product that raised the alert.
- **Source:** The product source that raised the alert.

See an example report [here](#).

## IBM i Specific Reports

The following report templates are specific to the IBM i operating platform.

### Consolidated LPAR Performance Report (Daily)

This report shows a full breakdown of the LPAR attributes on a daily basis and contains the following information:

- **Total CPU Utilization:** The total load on the CPU as a combined value from all IBM i devices.
- **Total CPU Utilization (by device):** The total load on the CPU per day and for each IBM i device.
- **System ASP % (by device):** The total percentage of ASP used per day for each IBM i device.
- **Response (by device):** A summary of the response time for each IBM i device.
- **Disk Full %:** The total space used across all disks, on a daily basis, expressed as a percentage.
- **Disk Full % (by disk):** The total space used per disk, on a daily basis and expressed as a percentage.
- **Disk System %:** The total disk system value used across all disks, on a daily basis, expressed as a percentage.
- **Disk System % (by disk):** The total disk system value used on a disk by disk basis, on a daily basis and expressed as a percentage.
- **LPAR Capacity % (by device):** A summary of the capacity at which each device was running, on a daily basis, expressed as a percentage.
- **Peak LPAR Capacity % (by device):** A summary of the peak capacity at which each device was running, on a daily basis, expressed as a percentage.
- **Pool Number:** The physical number assigned to each available pool, per day.
- **Pool Size:** The physical size of each pool per day.
- **DB Faults/Sec:** Machine and non-machine database faults per second, per day.
- **DB Faults/Sec:** Database faults per second, on a daily basis, per pool.

See an example report [here](#).

## Consolidated LPAR Performance Report (Monthly)

This report shows a full breakdown of the LPAR attributes on a monthly basis and contains the following information:

- **Total CPU Utilization:** The total load on the CPU as a combined value from all IBM i devices.
- **Total CPU Utilization (by device):** The total load on the CPU by month and for each IBM i device.
- **System ASP % (by device):** The total percentage of ASP used by month for each IBM i device.
- **Response (by device):** A summary of the response time for each month and for each IBM i device.
- **Disk Full %:** The total space used across all disks by month, expressed as a percentage.
- **Disk Full % (by disk):** The total space used per disk, by month and expressed as a percentage.
- **Disk System %:** The total disk system value used across all disks by month, expressed as a percentage.
- **Disk System % (by disk):** The total disk system value used on a disk by disk basis, by month and expressed as a percentage.
- **LPAR Capacity % (by device):** A summary of the capacity at which each device was running, by month, expressed as a percentage.
- **Peak LPAR Capacity % (by device):** A summary of the peak capacity at which each device was running, by month, expressed as a percentage.
- **Pool Number:** The physical number assigned to each available pool, by month.
- **Pool Size:** The physical size of each pool by month.
- **DB Faults/Sec:** Machine and non-machine database faults per second, by month.
- **DB Faults/Sec:** Database faults per second, by month, per pool.

See an example report [here](#).

## Halcyon iSeries At A Glance Report (Single Day)

This report shows a series of graphical images for daily key performance indicators for IBM i and contains the following information:

- **Device Name:** The name of the IBM i Device for which the report is detailed.
- **Response Time in ms:** Displays, in graphical format, the Response Time (in ms) for each hour during the day on which the report is based.
- **ASP%:** Displays, in graphical format, the %ASP used for each hour during the day on which the report is based.
- **Permanent Address %:** Displays, in graphical format, the Permanent Address usage, expressed as a percentage value for each hour during the day on which the report is based.
- **Temporary Address %:** Displays, in graphical format, the Temporary Address usage, expressed as a percentage value for each hour during the day on which the report is based.
- **Users Signed On:** Displays, in graphical format, the Number of Users signed on, for each hour during the day on which the report is based.
- **Total Jobs:** Displays, in graphical format, the Total Number of Jobs being run, for each hour during the day on which the report is based.
- **Number of Active Jobs:** Displays, in graphical format, the Number of Active Jobs, for each hour during the day on which the report is based.
- **Batch Jobs Held On Queue:** Displays, in graphical format, the Number of Batch Jobs Held On Queue, for each hour during the day on which the report is based.
- **Batch Jobs On Held Queue:** Displays, in graphical format, the Number of Batch Jobs currently on the Held Queue, for each hour during the day on which the report is based.
- **Batch Jobs In Run/Held:** Displays, in graphical format, the Number of Batch Jobs In Run/Held status, for each hour during the day on which the report is based.

See an example report [here](#).

## Halcyon iSeries Summary Report (Single Day)

This report shows a series of graphical images for daily key performance indicators for IBM i and contains the following information:

- **Device Name:** The name of the IBM i Device for which the report is detailed.
- **ASP%:** Displays, in graphical format, the %ASP used for each hour during the day on which the report is based.
- **Permanent Address %:** Displays, in graphical format, the Permanent Address usage, expressed as a percentage value for each hour during the day on which the report is based.
- **Temporary Address %:** Displays, in graphical format, the Temporary Address usage, expressed as a percentage value for each hour during the day on which the report is based.
- **Users Signed On:** Displays, in graphical format, the Number of Users signed on, for each hour during the day on which the report is based.
- **Total Jobs:** Displays, in graphical format, the Total Number of Jobs being run, for each hour during the day on which the report is based.
- **Number of Active Jobs:** Displays, in graphical format, the Number of Active Jobs, for each hour during the day on which the report is based.
- **Response Time in ms:** Displays, in graphical format, the Response Time (in ms) for each hour during the day on which the report is based.
- **Batch Jobs Held On Queue:** Displays, in graphical format, the Number of Batch Jobs Held On Queue, for each hour during the day on which the report is based.
- **Batch Jobs In Run/Held:** Displays, in graphical format, the Number of Batch Jobs In Run/Held status, for each hour during the day on which the report is based.
- **Batch Jobs On Held Queue:** Displays, in graphical format, the Number of Batch Jobs currently on the Held Queue, for each hour during the day on which the report is based.
- **Disk System %:** Displays, in graphical format, the amount of Disk System % used, for each hour during the day on which the report is based.
- **CPU%:** Displays, in graphical format, the amount of CPU used, expressed as a percentage value, for each hour during the day on which the report is based.

- **DB I/O CPU %:** Displays, in graphical format, the amount of Database Input/Output requests impacting on the CPU, expressed as a percentage value, for each hour during the day on which the report is based.

See an example report [here](#).

## Halcyon Job Statistics

This report shows the details of all the jobs run on each IBM i device for which this report is active. The following information is displayed:

- **System name:** The name of the IBM i device for which this report was generated.
- **Max Active Jobs:** Displays the maximum number of Active Jobs recorded over the time period. Shown in both tabular and graphical format.
- **Max Total Jobs:** Displays the maximum number of Total Jobs recorded over the time period. Shown in both tabular and graphical format.
- **Average Active Jobs:** Displays the average number of Active Jobs over the time period. Shown in both tabular and graphical format.
- **Average Total Jobs:** Displays the average number of Total Jobs over the time period. Shown in both tabular and graphical format.

See an example report [here](#).

## Halcyon LPAR Statistics

This report shows the details of all the jobs run on each IBM i device for which this report is active. Information is shown in both graphical and tabular format and contains the following:

- **System name:** The name of the IBM i device for which this report was generated.
- **Max LPAR Capacity %:** Displays the maximum LPAR Capacity reached, expressed as a percentage value.
- **Average LPAR Capacity %:** Displays the average LPAR Capacity, expressed as a percentage value.
- **Min LPAR Capacity %:** Displays the minimum LPAR Capacity used, expressed as a percentage value.

See an example report [here](#).

## Halcyon Performance Statistics

This report displays performance statistics for IBM i Devices and contains the following information:

In tabular format:

- **System name:** The name of the IBM i device for which this report was generated.
- **Average CPU Usage %:** Displays the Average CPU Usage % over the specified time period.
- **Average ASP Disk Usage %:** Displays the Average ASP Disk Usage % over the specified time period.
- **Average Response:** Displays the Average Response Time over the specified time period.

In graphical format:

- **Average CPU Usage %:** Displays the Average CPU Usage % over the specified time period.
- **Average ASP Disk Usage %:** Displays the Average ASP Disk Usage % over the specified time period.
- **Response Times:** Displays the Response Times over the specified time period.

In tabular format:

- CPU%, ASP Disk Usage % and Response Times by date for the specified time period.

See an example report [here](#).



## Halcyon Temp Address Report

This report shows information relating to the usage of Temporary Addresses on the IBM i.

- **System name:** The name of the IBM i device for which this report was generated.
- **Max Temp Address %:** The maximum number of temporary addresses used, expressed as a percentage value and displayed in both tabular and graphical format.
- **Average Temp Address %:** The average number of temporary addresses used, expressed as a percentage value and displayed in both tabular and graphical format.
- **Peak Temp Address %:** The peak number of temporary addresses used, expressed as a percentage value and displayed in tabular format.
- **Temp Address %:** The number of temporary addresses used, expressed as a percentage value and displayed in tabular format.

See an example report [here](#).

## AIX Specific Reports

The following report templates are specific to the AIX operating platform.

### AIX Report All Metrics

This report shows CPU Load for the following attributes, per AIX device, on a daily basis. Information is displayed in a variety of graphical formats:

- **AIX Device name:** The name of the AIX device.
- **Filesystem Space Used %:** The amount of Filesystem Space used, expressed as a percentage value.
- **Page File Used %:** The amount of Page File used, expressed as a percentage value.
- **Physical Memory Used %:** The amount of Physical Memory Used, expressed as a percentage value.
- **CPU Usage %:** The amount of CPU Usage, expressed as a percentage value.

See an example report [here](#).

## Halcyon AIX Top 10 CPU Usage

This report shows the CPU Load by the Top 10 processes, per AIX device, on a daily basis. Information is displayed in a both graphical and table formats:

- **AIX Device name:** The name of the AIX device.
- **Top 10 Processes:** The top 10 processes using the CPU, expressed as a percentage value and listed in order of most impact.

**WARNING:** See an example report [here](#).

## Halcyon AIX Top 10 Physical Memory Usage

This report shows the Physical Memory Usage by the Top 10 processes, per AIX device, on a daily basis. Information is displayed in a both graphical and table formats:

- **AIX Device name:** The name of the AIX device.
- **Top 10 Processes:** The top 10 processes using the Physical Memory, expressed as a percentage value and listed in order of most impact.

**WARNING:** See an example report [here](#).

## Halcyon NSS for IBM AIX Report

This report shows the following Performance Statistics for IBM AIX systems:

- **System Name:** The name of the IBM AIX device.
- **Average CPU Load %:** Displays the Average CPU Load, over the specified time period, as a percentage value.
- **Average Page File Used %:** Displays the Average Page File Used, over the specified time period, as a percentage value.
- **Max CPU Load %:** Displays the Max CPU Load, over the specified time period, as a percentage value.
- **Max Page File Used %:** Displays the Max Page File Used, over the specified time period, as a percentage value.
- **CPU Load:** Shows the CPU load, over the specified time period, as a percentage value of Processor Time and displayed in graphical format.
- **Disk Usage:** Shows the Disk Usage, over the specified time period, as a percentage value of Used Space and displayed in a graphical format.
- **Page File:** Shows the Page File Usage, over the specified time period, as a percentage value and displayed in a graphical format.

- **Physical Memory:** Shows the Physical Memory Usage, over the time period, as a percentage value and displayed in a graphical format.

See an example report [here](#).

## Cross-Platform Specific Reports

The following report templates are specific to Cross-Platform networks.

### Halcyon Cross-Platform Combined (IBM i - Windows)

This report shows the CPU, Disk and Memory Usage, for both IBM i and Windows devices on a daily basis. Information is displayed in a graphical format.

For IBM i Devices:

- **IBM i Device name:** The name of the IBM i device.
- **CPU Load:** The usage of the CPU expressed as a percentage value.
- **ASP Disk Usage:** The Used ASP Disk space expressed as a percentage value.
- **Memory Pool:** The amount of Memory Pool used by \*MACHINE, \*BASE, \*INTERACT and \*SPOOL storage pools.

For Windows devices:

- **Windows Device name:** The name of the Windows device.
- **CPU Load:** The usage of the CPU expressed as a percentage value.
- **Disk Usage:** The used Disk space expressed as a percentage value.
- **Page File:** The amount of Page File memory used.

See an example report [here](#).

## Halcyon Cross-Platform CPU Usage

This report shows the CPU Usage, for devices on any platform on a daily basis. Information is displayed in a graphical format.

For IBM i Devices:

- **IBM i Device name:** The name of the IBM i device.
- **Average CPU Usage %:** The average usage of the CPU expressed as a percentage value.

For Windows, AIX and Linux devices:

- **Windows, AIX or Linux Device name:** The name of the device.
- **CPU Load:** The usage of the CPU expressed as a percentage value of Processor Time.

See an example report [here](#).

## Halcyon Cross-Platform Disk Usage

This report shows the Disk Usage, for devices on any platform on a daily basis. Information is displayed in a graphical format.

For IBM i Devices:

- **IBM i Device name:** The name of the IBM i device.
- **ASP Disk Usage %:** The usage of the ASP Disk expressed as a percentage value.

For Windows, AIX and Linux devices:

- **Windows, AIX or Linux Device name:** The name of the device.
- **Disk Used %:** The usage of the CPU expressed as a percentage value of Processor Time.

See an example report [here](#).

## Halcyon Cross-Platform Memory Usage

This report shows the Page File and Memory Pool usage in a graphical format expressed. Page File Memory usage is expressed as a percentage value and Memory Pool in Size (Mb).

For IBM i Devices:

- **IBM i Device name:** The name of the IBM i device.
- **Memory Pool Size (Mb):** The usage of the Memory Pool expressed as a size (in Mb) value and shown for \*MACHINE, \*BASE, \*INTERACT, and \*SPOOL storage pools.

For Windows, AIX and Linux devices:



- **Windows, AIX or Linux Device name:** The name of the device.
- **Page File Used %:** The usage of the Page File expressed as a percentage value.

See an example report [here](#).

# Saving Halcyon Report Templates to the Database

Standard report templates are included with Advanced Reporting Suite. However these are not visible from the Web interface unless previously saved from within the [Report Designer](#) component.

To save Report Templates to the Database:

1. Start the Advanced Reporting Suite Report Designer by using **Start | Programs | Halcyon Advanced Reporting Suite | Report Designer**.
2. From the top-left corner of this display, click the  **Page** icon and from the drop-down menu select **Open File**.
3. From within the **Open** dialog, navigate to the **Templates** directory within the install folder. For a default installation, the path is:  
C:\Program Files\Halcyon\Reporting Suite\Templates\
4. Select any one of the listed templates and click **Open**. The report template is displayed within Report Designer.
5. Click  again and from the drop-down menu select **Save As**.
6. Select **Report**. From within the **Save As** dialog click **Save**. The report template is now saved to the database.
7. Repeat steps **2 to 6** for the remaining templates.

**NOTE:** It is not possible to add report templates directly from within Advanced Reporting Suite. They must be created using the Advanced Reporting Suite Report Designer and saved using the above process.

When opening the Advanced Reporting Suite interface in future, all report templates that have been saved using the above guidelines are visible and available for export from within the **Reports** tab.

# Exporting Reports

Exporting Reports allows you to export report data, in PDF format, using templates that you have previously created and saved using the Report Designer element of Advanced Reporting Suite.

## To export Reports:

1. From the main Reports display, single-click on each Report that you wish to export. Multiple Reports can be selected. See [Combining Reports](#) for more information on this feature.
2. Right-click and select **Export** from the pop-up menu. The Export Reports pop-up dialog is displayed.

The following parameters are available on this display:

## Date From

Specifies the date from which performance data is selected for the Report. Type the required date directly into this field. If the Interval parameter is set to Minute or Hourly, you can also specify the exact time from which the Report is generated.

## Date To

Specifies the date to which performance data is selected for the Report. Type the required date directly into this field. If the Interval parameter is set to Minute or Hourly, you can also specify the exact time to which the Report is generated.

## Interval

From the drop-down menu list, select the performance data interval period that you wish to use as the basis of this Report. You can select any of the performance data periods; Minute, Hourly, Daily or Monthly but you cannot combine intervals on the same Report.

## Time Zone

If you have selected Minute or Hourly as the interval period you can set, if applicable, the time zone for the selected devices.

**WARNING:** If you do not set this time zone setting to match the time zone of the device (as set in the [Time Zone](#) setting), then the Report data will show the performance data at the incorrect time periods for the device. Similarly, be careful when selecting multiple devices in case they span different time zones.

Select one of the following options:

### Select All Records

Select this option to select all performance data records for the chosen devices, time period and interval to be included on the Report.

### Select Top nn Records

Choose this option to select the top NN (where NN is the number) records for the chosen devices, time period and interval to be included on the Report.

#### EXAMPLE:

- Top 10 records for period 1st March to 7th March for Minute intervals would result in the first 10 minutes of 1st March performance data being included.
- Top 10 records for period 1st March to 7th March for Hourly intervals would result in the first 10 hours of 1st March performance data being included.



- Top 10 records for period 1st March to 7th March for Daily intervals would result in only the first 7 days of performance data being included.

## Devices

Lists all the devices that have been defined for the collection of performance data and for which performance data exists. Check those devices that you wish to include on the selected Report.

## Combining Reports

If you select more than one type of Report on the initial Reports display, you have the option of combining the report data produced.

If you decide to combine Reports you generate a single Report with sequential numbering throughout, split by Report title and device name.

If you decide not to combine Reports you generate each Report with its own sequential numbering split by device name.

Click **OK** to generate the selected Report data or **Cancel** to abort.


# Report Filtering

Report Filtering works in the same way as [Filtering](#) does within the Administration section of Advanced Reporting Suite.

To apply a Report filter:

1. Select the **Groups** which contain the assigned **Reports** you want to view. Only Reports that are assigned to the selected Group(s) are then available for selection in the Reports Filter.
2. When your filter structure has been defined, click **Apply Filter**. All Reports assigned to the Group definition(s) are returned in the main display panel of Advanced Reporting Suite.

# Saving Reports

Once the Report has been generated and is visible on-screen either use the standard  **Adobe Save** icon or select **File | Save As**.

You can then specify the directory path to where you wish to save the file.

**TIP:** See [Viewing and Saving Reports in Google Chrome Browser](#) in the Troubleshooting section for more information on how to view and save PDF files from within the Google Chrome browser.

# Viewing and Saving Reports in Google Chrome Browser

Google's Chrome browser uses its own PDF viewer by default. This however, does not let you save pages as PDF files (as you can from within Internet Explorer or Firefox browsers for example).

**NOTE:** In order to use the instructions below, you must have a PDF viewer, such as Adobe Acrobat Reader, installed.

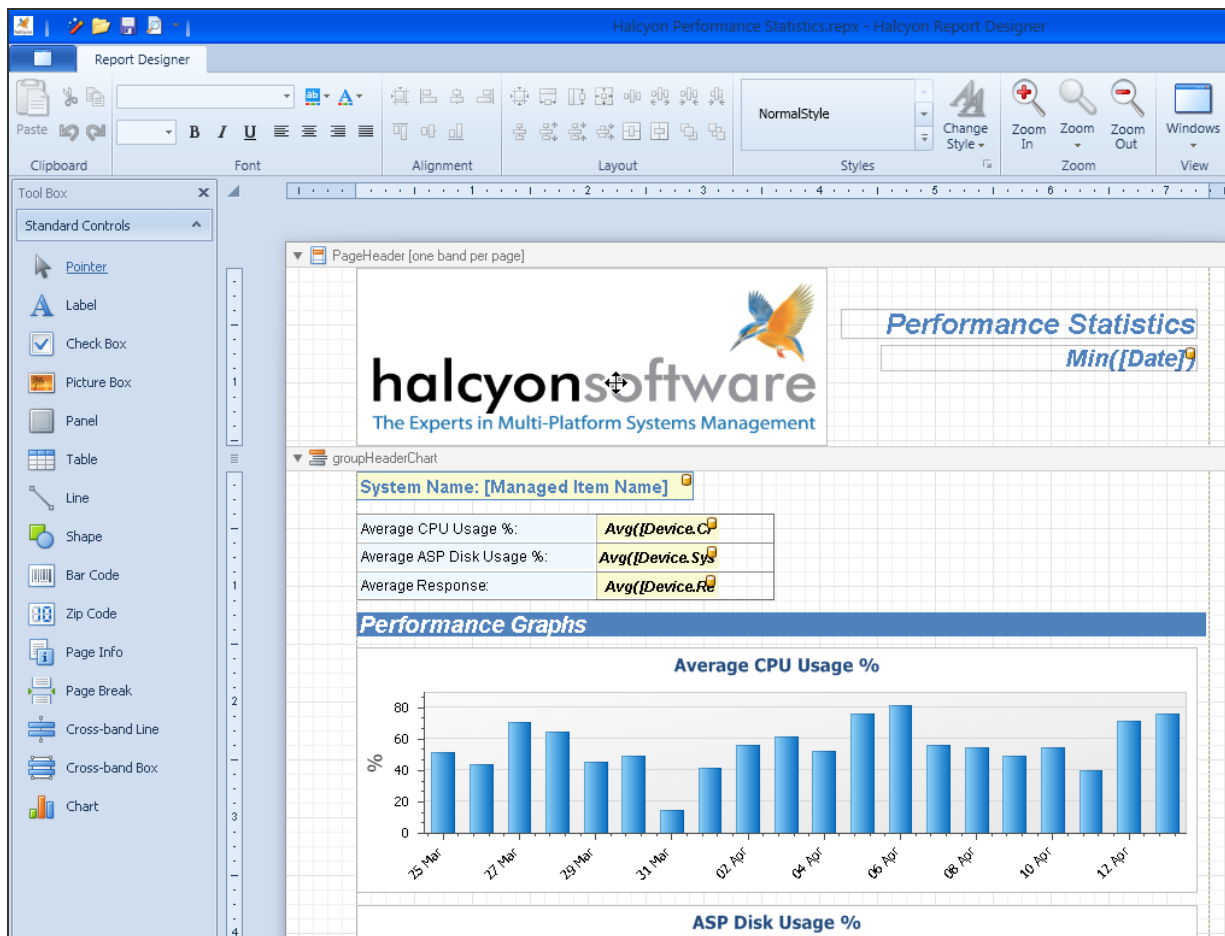
In order to be able to save reports as PDF documents in Chrome:

1. Copy and paste the following address into your Chrome address bar:  
chrome://settings/content  
The **Content Setting** box will automatically open.
2. Scroll to the bottom of the **Content Setting** box until you see **PDF Documents**.
3. Check the box that says **Open PDF files in the default PDF viewer application**.
4. Click **Done**.

# Report Designer

This section contains information about the basic principles of creating reports with Report Designer.

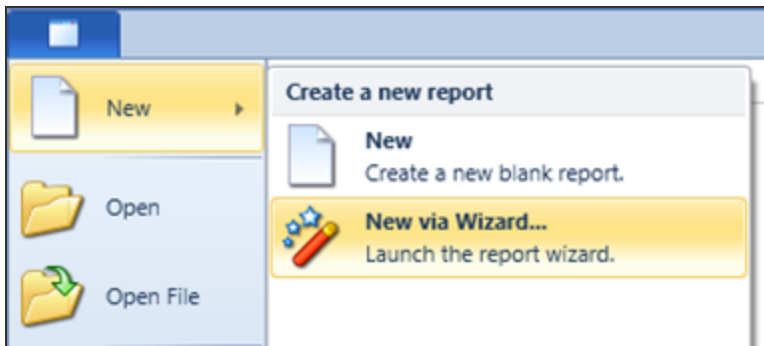
The Report Designer allows you to create new reports from scratch, bind them to data, and even pass them to another workstation and load them into another instance of the Report Designer. In addition to report editing capabilities, Report Designer allows you to display a Print Preview and send its output to a printer or export it to a file on disk.



# Report Wizard

The Report Wizard is a tool that allows you to easily create reports based on built-in templates. Using this tool, you can create a new report from scratch via a series of instruction pages.

In the main menu, select **New | New via Wizard...** or press **CTRL+W**.



Using this wizard, you can easily create a banded report displaying data in a tabular format.

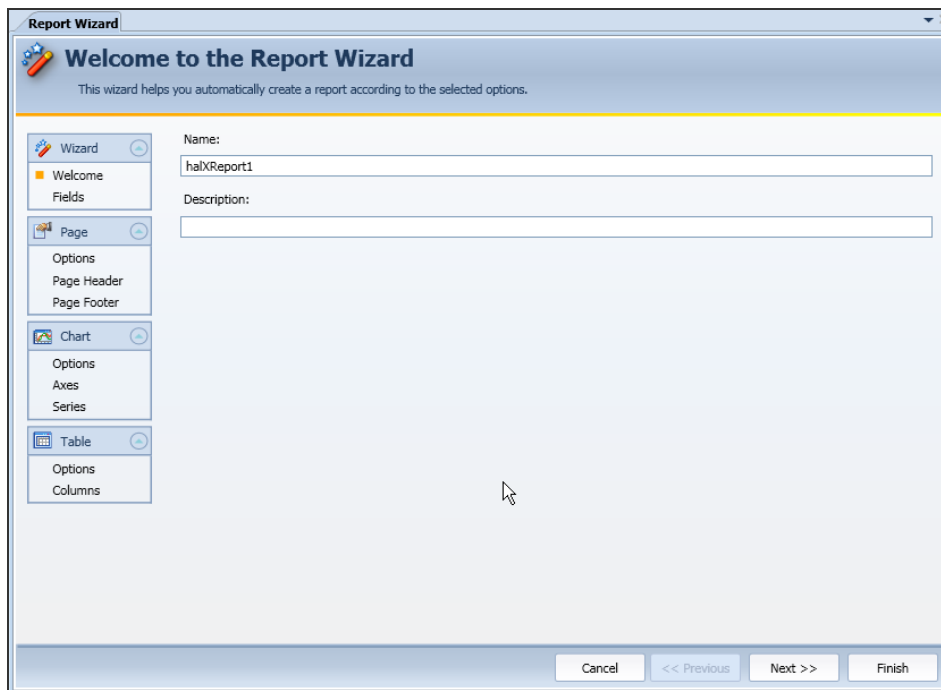
While setting up your report, you'll be able to group data, add totals to your report, apply one of the predefined report styles, and so on.


## Standard Report Wizard

The Report Wizard allows the easy set up of reports and is useful to get quickly accustomed to the software and the features within.

The Welcome dialog prompts you to enter a **Name** and **Description** for the new report.

**NOTE:** The Report Wizard is already bound to the Performance Statistics database, so all you need to do is define which statistics appear on the report and in which type of format you'd like them displayed.



You can view your progress through the various stages of the Report Wizard as the  orange square indicator moves down through each option on the left-hand side of the Wizard dialog. Use the links below to learn more about each step of the Report Wizard.

## Wizard Options

[Report Wizard Step 1 - Selecting the Fields](#)

[Report Wizard Step 2 - Page Settings](#)

## Page Options

[Report Wizard Step 3 - Page Header](#)

[Report Wizard Step 4 - Page Footer](#)

## Chart Options

[Report Wizard Step 5- Chart Options](#)

[Report Wizard Step 6 - Chart Axes Options](#)

[Report Wizard Step 7 - Chart Series Options](#)

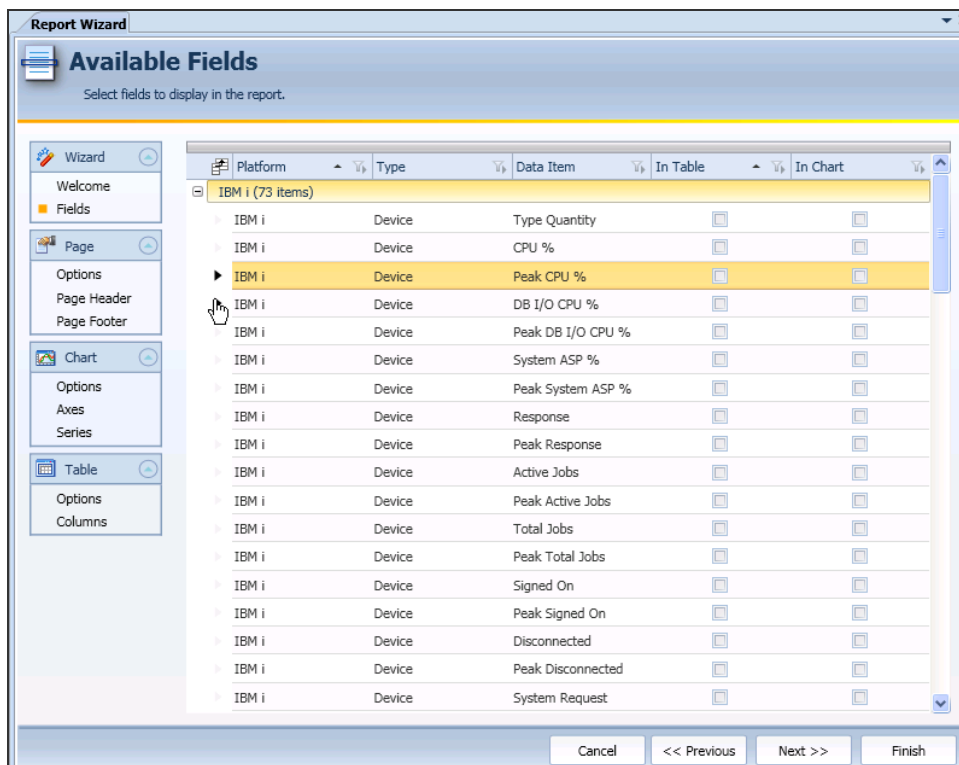
## Table Options

### [Report Wizard Step 8 - Table Appearance](#)

### [Report Wizard Step 9 - Table Columns](#)

## Report Wizard Step 1 - Selecting the Fields

This step allows you to select the field data that actually appears on the report. You can specify whether the data is displayed in tabular or chart format. Combinations of both types are allowed within a single report.



## Navigating the Available Fields display

There are many different ways in which you can view and manipulate the data on this display.

When you first open this display the most frequently used report fields are already listed as column headings. These are:

- **Platform** - This column displays the platform for which the performance statistics are available. Note that the platform setting: **Interval** - is used for the settings that are not platform specific:




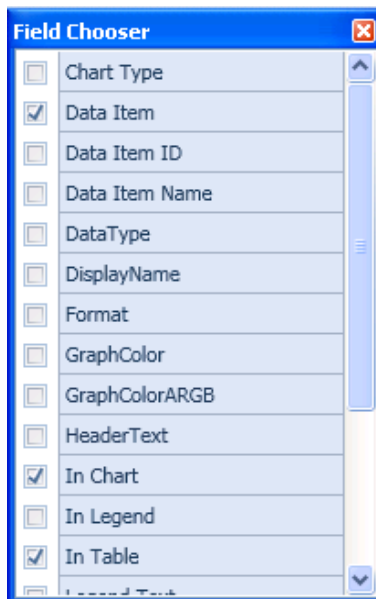
**Date**  
**Device Name**  
**SLA Conditions Met**

- **Type** - This column defines the type of performance data record associated with each platform.
- **Data Item** - This column defines the individual performance data item.
- **In Table** - Defines if the selected performance data record is going to be displayed on the report in a tabular format. Click the required check box to add the selection.
- **In Chart** - Defines if the selected performance data record is going to be displayed on the report in chart format. Click the required check box to add the selection.

These five columns provide the default view when opening the Report Wizard for the first time. However, you can also add further or remove current fields as you wish. For this purpose, you can invoke the **Field Chooser** dialog.

## Field Chooser

The Field Chooser dialog is invoked by clicking the  **Field Chooser** icon to the left of the first column in the **Available Fields** display.



This dialog lists all of the available columns heading that can be used within the Available Fields display in order that additional fields may selected and included on your report.

Click the check box next to any heading to select it for inclusion or if already selected, click to remove from the display. As each field column is added or removed, the Available Fields display expands or contracts accordingly. There is no limit to the number of column headings you can use any at one time.

When you have selected the field column headings, close the Field Chooser dialog. This can be re-opened at any time from this display, if required.

## Ascending/Descending Sort Order

When moving the cursor over a column heading it becomes highlighted so that you can see on which column the current focus is placed. Clicking on the column heading allows you to specify the sort order of the fields listed within that column. The following image shows the focus being on the 'Type' column.

Platform	Type	Data Item	In Table	In Chart
IBM i	Device	Batch Jobs In Run/Hel	<input type="checkbox"/>	<input type="checkbox"/>
IBM i	Device	Peak Batch Jobs In Ru	<input type="checkbox"/>	<input type="checkbox"/>
IBM i	Device	Batch Jobs Held on Ql	<input type="checkbox"/>	<input type="checkbox"/>

To change the order in which the fields are listed, click on the small directional arrow within the column heading box. Fields within this column are then listed in Ascending or Descending order dependent on the arrow direction.

**TIP:** The sort order arrow is constantly displayed in the **Platform** column.

## Filter

The filter option allows you to display just those column fields in which you are interested. The list of available filters changes with each column.

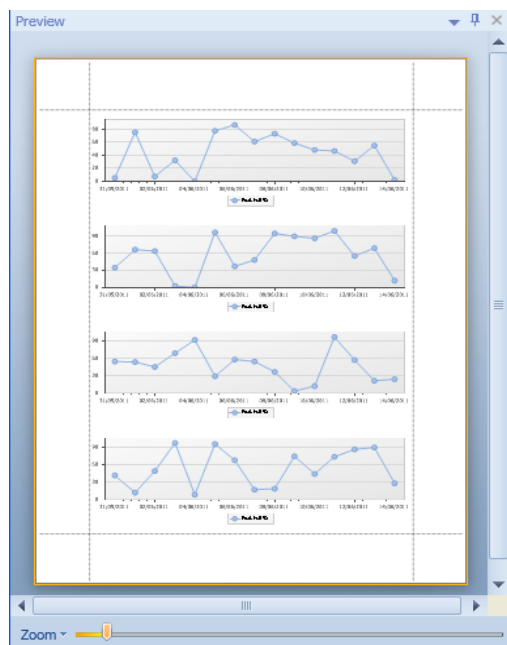
To activate the filter, click the icon when the focus is on the column to which the field filter is to be applied. From the resulting drop-down menu, select the filter that you wish to apply. The available fields, across all columns, are now updated to reflect the applied filter. In the screen shot below, the Type column has had the filter setting of 'Disk' applied.



## Preview

The Preview panel to the left-hand side of the Available Field panel, allows you to view how the performance data fields (and other formatting options defined later) you have selected will appear if the report is generated.

**NOTE:** Prior to any fields being selected, the Preview Panel is blank. The data shown on the report is test data to show a representation of how the report may appear.



If the preview panel is not big enough to display the report, you can position the cursor over the vertical panel boundary line. The cursor changes from a pointer to a resize

tool. Left-click and drag the vertical line to its new position and release the mouse button.

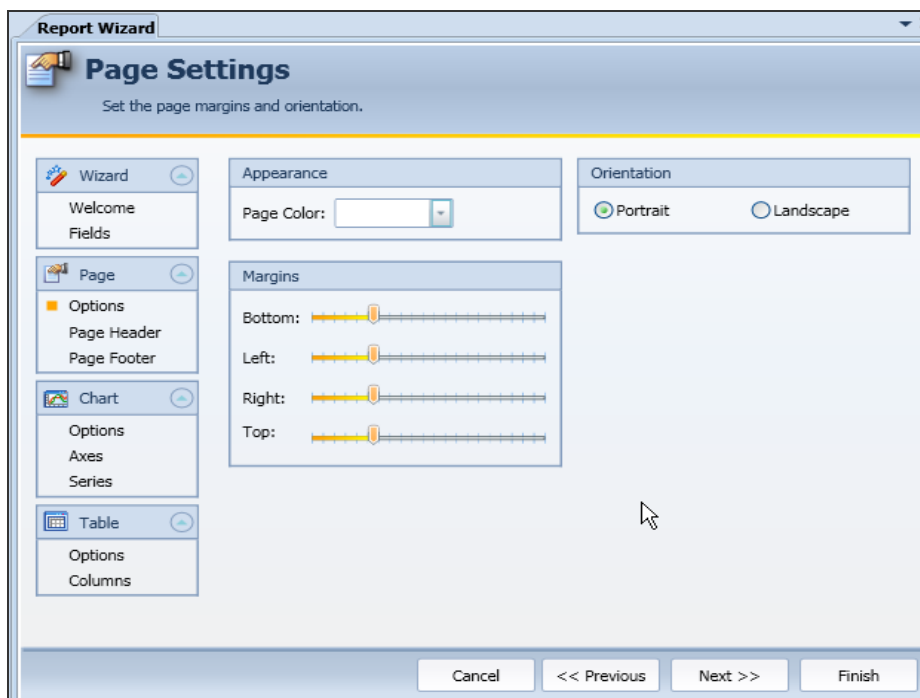
You can also Zoom into the detail of the report in one of two ways:

- Click and drag on the Zoom control at the bottom of the Preview Panel to move the view in and out of the report
- Click on the Zoom down arrow and select a view from the drop-down menu

When you have made your performance data field selections and decided whether they will appear in tabular or chart format (or both), click **Next** to determine the Page options.

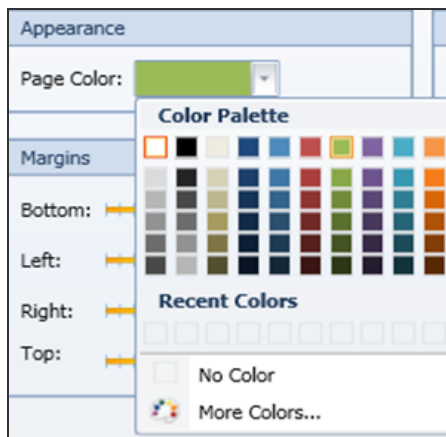
## Report Wizard Step 2 - Page Settings

The **Page Settings** fields allow you to specify the background color of the page, report orientation and the size of the margins.



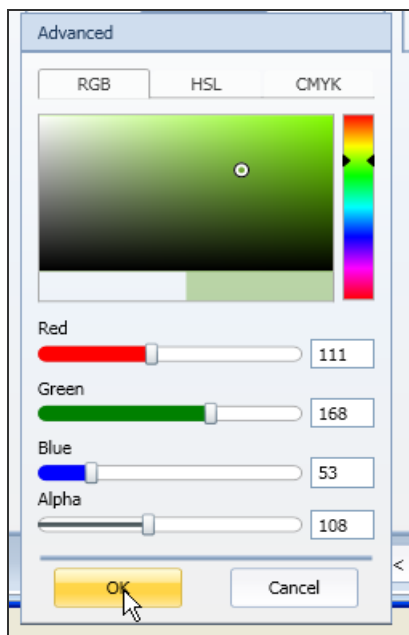
### Appearance

This option allows you to specify the color of the page on which the report is printed. The option always default to White/No Color.



To select an alternative color, use the drop-down menu option to display the current color palette. Hovering the mouse pointer above each color shows the result in the Preview Panel.

Select the **More Colors...** option to allow you to select a custom color.



You can use:

- **RGB** (Red, Green, Blue)
- **HSL** (Hue, Saturation, Luminosity)
- **CMYK** (Cyan, Magenta, Yellow, Black)

color definition protocols when selecting the required color option.

## Orientation

This setting specifies the orientation of the report when printed.

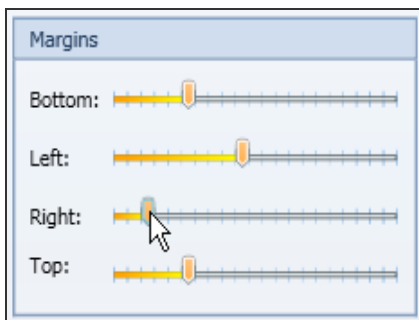
- **Portrait** - The report is printed with the short-edge of the paper at the top
- **Landscape** - The report is printed with the long-edge of the paper at the top

The orientation of the page in the **Preview Panel** changes accordingly with selection.

## Margins

The margin settings define the area on the page that is available for the presentation of the Report Data. The bigger the margin, the less room there is on the page for the performance data. It is possible to set individual widths to the Bottom, Left, Right and Top Margins. As a guideline, the default setting for each is roughly 25% of the page area.

To change a margin setting, left-click and drag the pointer on the relevant margin control to its new position and release.

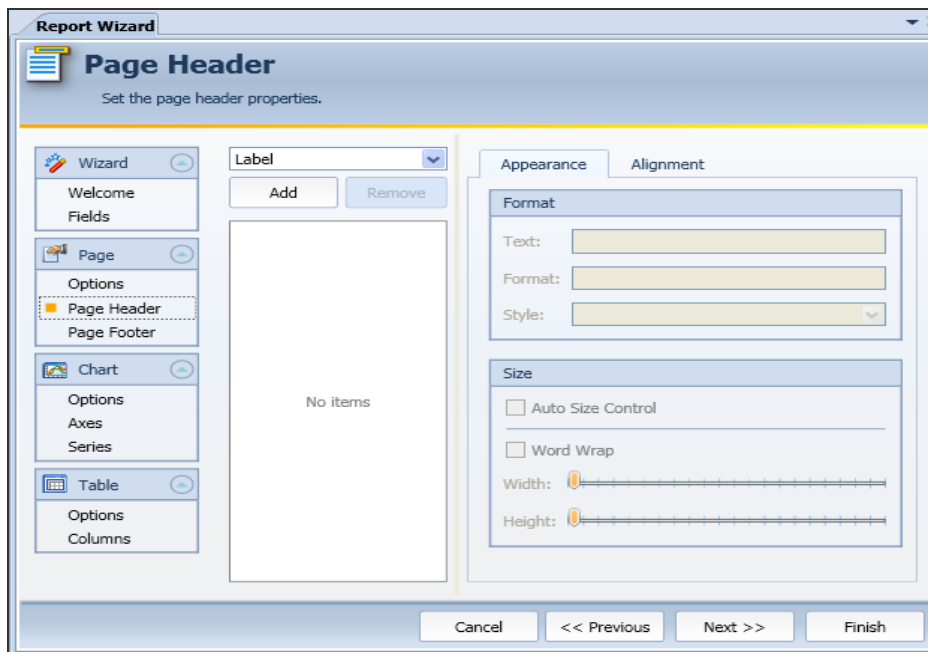


Changes to the margin settings are reflected in the Preview Panel.

When you have finished specifying the page settings, click **Next** to continue.

## Report Wizard Step 3 - Page Header

This step allows you to add commonly used information to the top of each page of the report. Selected fields are entered directly below the top margin.



The following information fields can all be added to the Page Header.

- Label
- Line
- Page Number
- Current of Total Page Numbers
- Page Number Roman Lowercase
- Page Number Roman Uppercase
- Current Date and Time
- User Name
- Device Name
- Platform Name

**NOTE:** The above fields are added to the page header of the report in the order that they are listed so if you select line first, everything else will be below the line!

You can specify the Format, Size and Alignment for each added informational field.

To add an information field, use the drop-down choice box to make a selection and then click **Add**. The field is added to the list and the Preview Panel of the report is updated accordingly. Once selected, the **Format**, **Size** and **Alignment** options are enabled.



## Label

The Label informational field adds a simple text entry at the top of the report that can then be formatted to the wording that you require.

### Formatting Options:

**Text:** Change the text from Label to the text that you require. Once changed the name of the label is changed in the field list and in the Preview Panel.

**Format:** Not applicable to the Label field.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the text. See [Styles](#) for more information.

## Line

The Line information field adds a line to the top of the report.

### Formatting Options:

**Text:** Changes the name of the line in the field list but leaves the line as applied in the Preview Panel.

**Format:** Not applicable to the Line field.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the line. See [Styles](#) for more information.



## Page Number

The Page Number information field adds a page number at the top of the report. This number is sequential with each additional page.

### Formatting Options:

**Text:** Changes the name of the page number in the field list but leaves the page number as applied in the Preview Panel.

**Format:** Use this field to add a prefix to the page number. For example, typing **Page {0}** in this field will result in each page of the report being labeled as Page 1, Page 2, Page 3 and so on.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the page number. See [Styles](#) for more information.

## Current Total of Page Numbers

The Current Total of Page Numbers information field works in the same way as the Page Number field but keeps a running total of current page against the number of pages in the report.

### Formatting Options:

**Text:** Changes the name of the current total of page numbers in the field list but leaves the current total of page numbers as applied in the Preview Panel.

**Format:** Use this field to add a prefix to the page number. For example, typing **Page {0} of {1}** in this field will result in each page of the report being labeled as Page 1 of 3, Page 2 of 3, Page 3 of 3 and so on. If you omit the word page but just use **{0} of {1}**, only the page numbers are displayed.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the page number. See [Styles](#) for more information.

## Page Number (Roman, Lowercase)

The Page Number (Roman, Lowercase) information field adds a page number at the top of the report. This number is sequential with each additional page and is displayed as a lowercase roman numeral, for example, i, ii, iii, and so on.

### Formatting Options:

**Text:** Changes the name of the page number in the field list but leaves the page number as applied in the Preview Panel.

**Format:** Use this field to add a prefix to the page number. For example, typing **Page {0}** in this field will result in each page of the report being labeled as Page i, Page ii, Page iii and so on.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the page number. See [Styles](#) for more information.

## Page Number (Roman, Uppercase)

The Page Number (Roman, Uppercase) information field adds a page number at the top of the report. This number is sequential with each additional page and is displayed as an uppercase roman numeral, for example, I, II, III, etc.

### Formatting Options:

**Text:** Changes the name of the page number in the field list but leaves the page number as applied in the Preview Panel

**Format:** Use this field to add a prefix to the page number. For example, typing **Page {0}** in this field will result in each page of the report being labeled as Page I, Page II, Page III and so on

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the page number. See [Styles](#) for more information

## Current Date and Time

The Current Date and Time informational field adds the current date and time at the top of the report. You can omit either the date or time from the equation if you wish.

### Formatting Options:

**Text:** Changes the name of the Current Date and Time in the field list but leaves the date and time as applied in the Preview Panel.

**Format:** The date and time must be entered using the prefix {0:}. Any format can be used as long as it follows the following protocols:

**dd** - lowercase dd to represent the day.

**MMMM** - uppercase MMMM to represent the month.

**yyyy** - lowercase yyyy to represent the year.

**hh** - lowercase hh to represent hours.

**mm** - lowercase mm to represent minutes.

**tt** - if required, lowercase tt to represent seconds so: {0:dd MMMM yyyy}

would result in, for example, 10 June 2011

{0:MMMM dd yyyy hh:mm} would result in, June 10 2011 10:58.

**NOTE:** You may need to increase the Width Control within the Size options to view the full length of the field in the Preview Panel.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the current date and time. See [Styles](#) for more information.

## User Name

The User Name informational field adds the name of the current Windows user at the top of the report.

### Formatting Options:

**Text:** Changes the name of the user name label in the field list but leaves the user name as the current user when applied in the Preview Panel.

**Format:** Use this field to add a prefix to the user name. For example, typing **User: {0}** in this field will result in each page of the report being labeled as User: current username.

**NOTE:** You may need to increase the Width Control within the Size options to view the full length of the field in the Preview Panel.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the user name. See [Styles](#) below.

## Device Name

The Device Name informational field adds the name of the device/system to which the performance data applies at the top of the report.

### Formatting Options:

**Text:** Changes the name of the device name label in the field list but leaves the device name unchanged when applied in the Preview Panel.

**Format:** Not applicable to the Device Name field.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the device name. See [Styles](#) below.

## Platform Name

The Platform Name informational field adds the name of the platform to which the performance data applies at the top of the report.

### Formatting Options:

**Text:** Changes the name of the platform label in the field list but leaves the platform name unchanged when applied in the Preview Panel.

**Format:** Not applicable to the Platform Name field.

**Style:** If required, from the drop-down list, select a pre-defined style to apply to the device name. See [Styles](#) below.

## Styles

There are six different pre-defined 'house' styles that you can apply to the performance fields. Once applied, you can view the change in appearance within the Preview Panel.

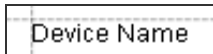
The following styles can be applied:

- NormalStyle
- PageHeaderStyle1
- PageHeaderStyle2
- TableEvenStyle

- TableHeaderStyle
- TableOddStyle

## NormalStyle

Leaves the current formatting style unchanged.



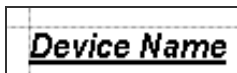
## PageHeaderStyle1

Changes the current style to bold text.



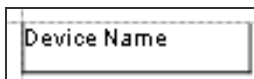
## PageHeaderStyle2

Changes the current style to bold, italic, underlined text.



## TableEvenStyle

Changes the current style to normal text, top-left aligned within a table cell.



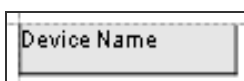
## TableHeaderStyle

Changes the current style to Inverse text, center-aligned within a table cell.



## TableOddStyle

Changes the current style to normal text, top-left aligned within a shaded table cell.



## Size options

The sizing options allow you to specify the width and height of each of the page header field properties. Changes can be viewed within the Preview Panel.

### Auto Size Control

Enable this setting to auto-size all of the Page Header fields, so that they fit correctly on the page. Use of this setting, disables the Width and Height size bar functionality. This is the recommended option.

### Word Wrap

If the entered text is too large to fit on one line, use of the Word Wrap option forces the text to fit between the available margin space and begins a new line where necessary.

### Width

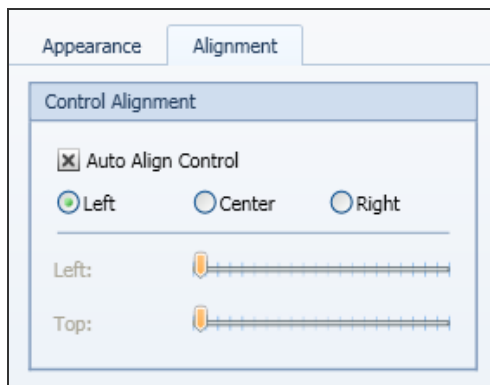
Use the sliding scale to increase (or decrease) the width of the field control within the Page Header on the report page. Changes are only visible within the Preview Panel if using one of the TableStyle formats.

### Height

Use the sliding scale to increase (or decrease) the height of the field control within the Page Header on the report page. Changes are only visible within the Preview Panel if using one of the TableStyle formats

## Alignment options

Click the Alignment tab on the Page Header properties page to display the available alignment controls.



These controls allow you to specify the positioning of the text on the page.

## Auto Align Control

Enable this setting to auto-align all of the Page Header fields, so that they are correctly aligned on the page. You can use this setting in combination with the Left, Center and Right alignment options to position the field text precisely on the report page.

Use of this setting, disables the Left and Top size bar functionality. This is the recommended option.

**Left** - Positions the Page Header field information at the left of the page.

**Center** - Positions the Page Header field information in the center of the page.

**Right** - Positions the Page Header field information at the right of the page.

## Self Align Controls

**Left:** Use the sliding scale to increase (or decrease) the distance of the field control form the left-hand side of the report page.

**Top:** Use the sliding scale to increase (or decrease) the distance of the field control form the top margin of the report page.

When you have finished setting the Page Header controls, click **Next** to continue.

## Report Wizard Step 4 - Page Footer

The settings used by the Page Footer controls are exactly the same as those that can be applied to the Page Header, except that the field information appears at the bottom of the report page rather than at the top.

**NOTE:** Please refer to [Report Wizard Step 3 - Page Header](#) for more information regarding the fields and controls on this page.


## Report Wizard Step 5 - Chart options

The controls on this page are used to determine the appearance of any chart-based performance data included on your report.

**TIP:** The following 3 steps can be ignored if your report does not contain any chart-based data. Go to [Step 8](#).

**Chart Appearance**

Appearance Name: The Trees ▼

Chart Size: 

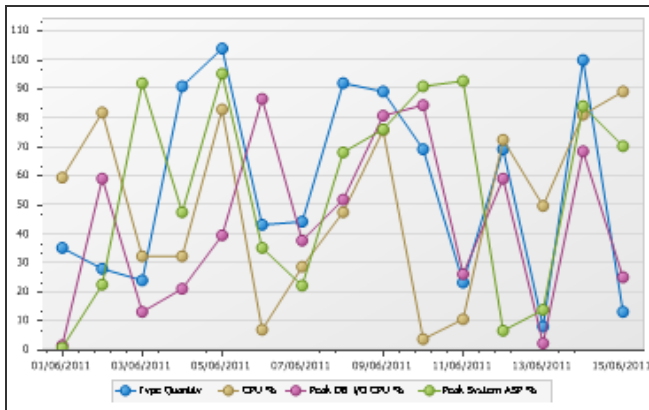
☒ Show Chart Legend

☐ Print Chart On Every Page

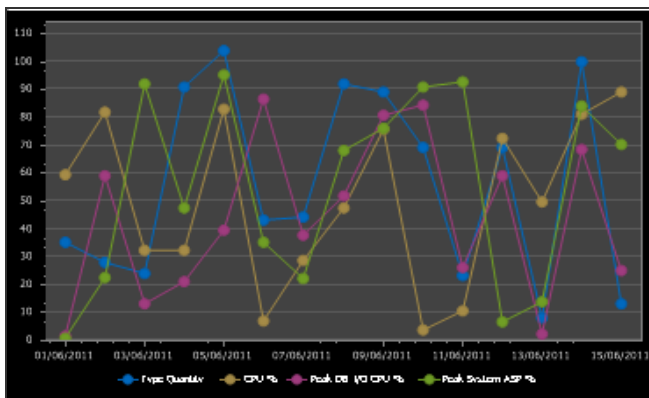
## Appearance Name

Use the drop-down choice menu to apply a pre-defined color scheme to the elements of your chart data. The following options are available:

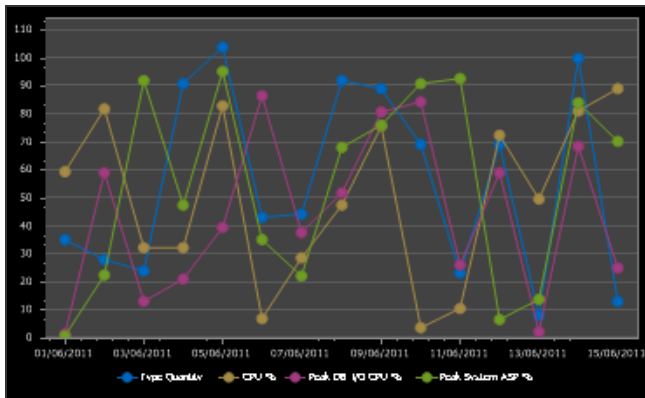
### Chameleon



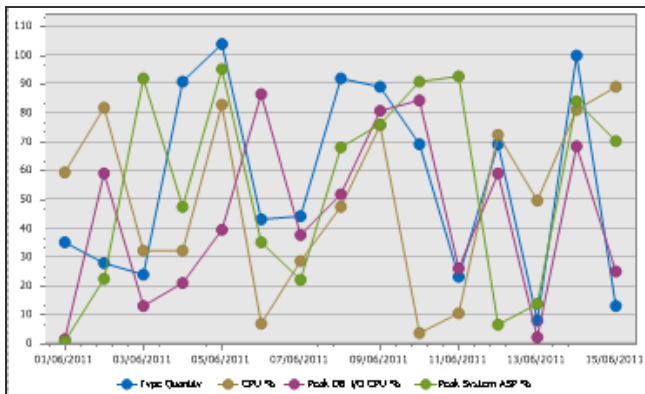
### Dark



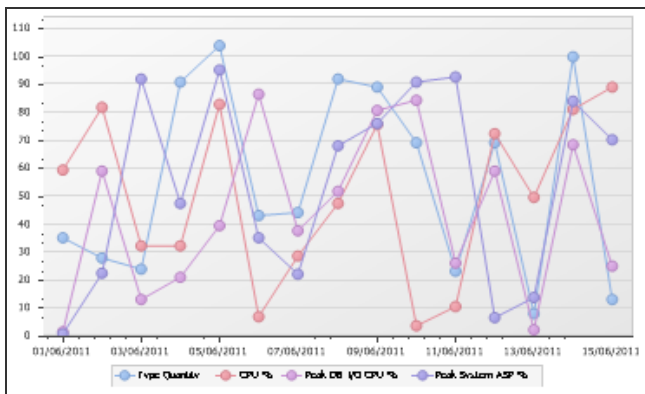
## Dark Flat



## Gray

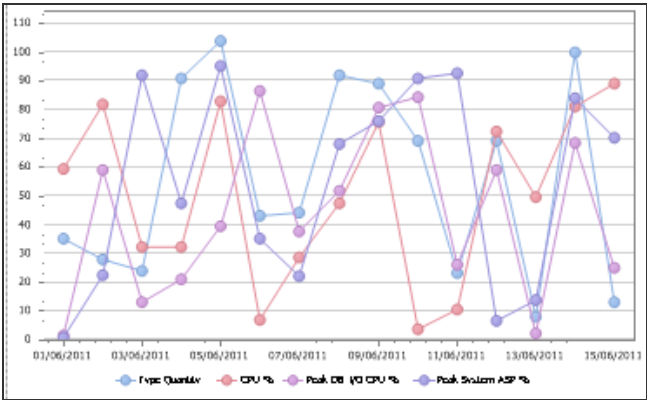


## In A Fog

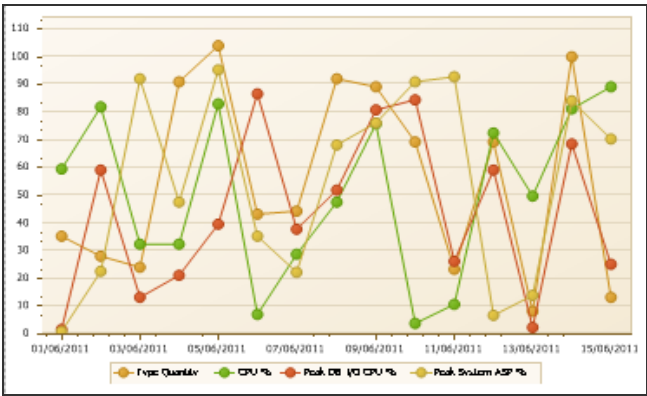




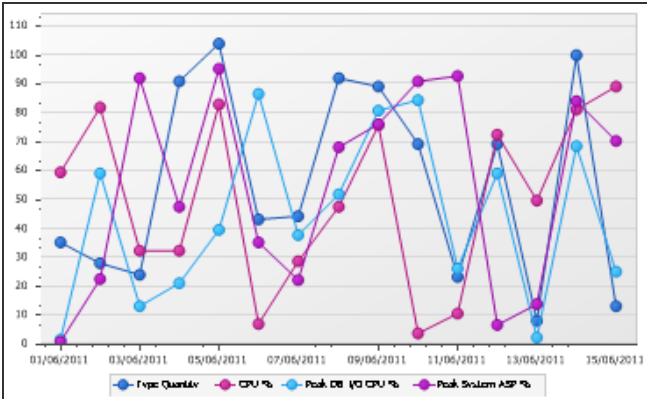
Light



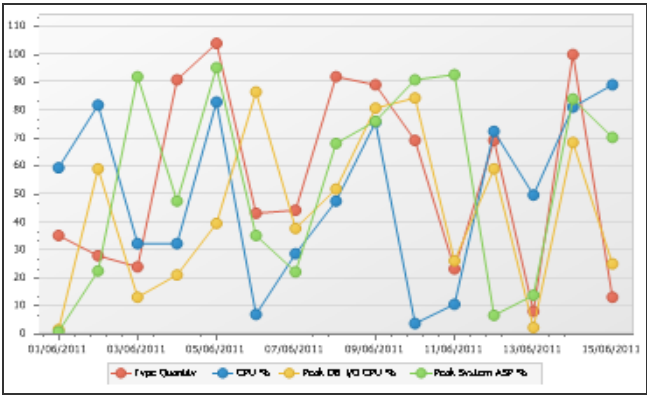
Nature Colors



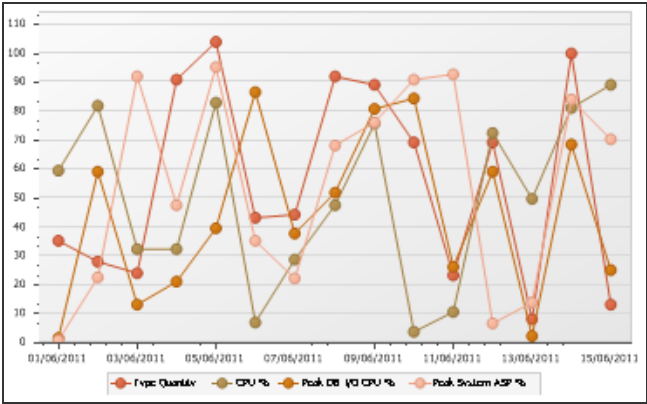
Northern Lights



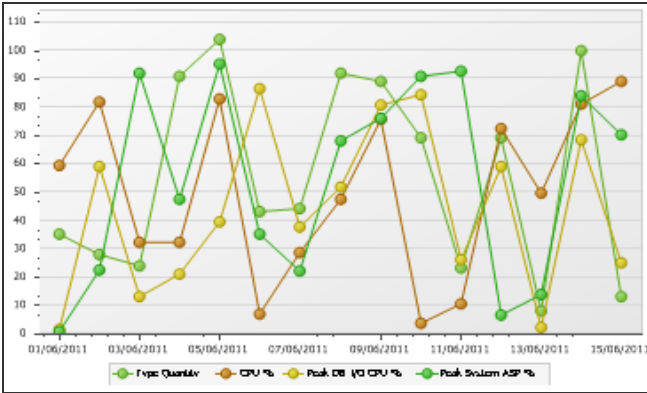
Pastel Kit



Terracotta Pie



The Trees



## Chart Size

Use the sliding scale to increase (or decrease) the size of the chart(s) currently included on the report. Any changes made are reflected within the Preview Panel. Note that the chart size can only be contained within the width of the margins on the page. If you need to adjust the margins, use the **Previous** button to return to the Page Options settings.

Additionally, if multiple charts are included on the report, increasing the size may result in only one or two charts fitting on a single page.

## Show Chart Legend

This setting, enabled by default displays a key legend next to the chart to enable the user to determine the identity of the performance data fields included on the report.

## Print Chart on Every Page

This setting allows you to print the chart(s) on every page of the report when the report is generated.

When you have selected the initial chart formatting options, click **Next** to continue.

# Report Wizard Step 6 - Chart Axes options

These options allow you to specify whether the chart axes labels are printed, and if so, the angle at which they appear on the report.

The same options are available for both the X (Horizontal) and Y (Vertical) axes.

## Visible

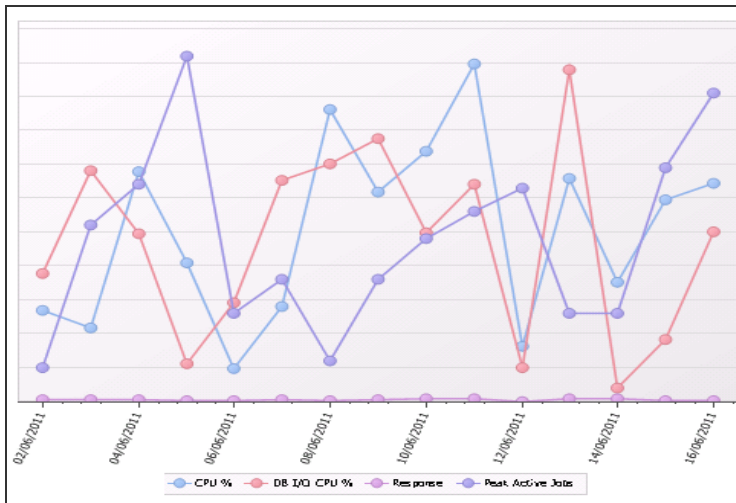
Checked by default, this setting displays the scale, beside on underneath, the relevant axis. Removing this setting means that the axis is unlabeled and therefore no scale is visible.

## Label Angle

Only available if the **Visible** check box is checked, this sliding scale allows you to increase (or decrease) the angle at which the axis labeling is printed on the report.

The base point of this setting is horizontal. Increasing the setting moves the labels through 180 degrees.

The following screen shot shows a chart, with the X axis label angled and the Y axis label removed.



When you have selected the chart axes formatting options, click **Next** to continue.

## Report Wizard Step 7 - Chart Series Options

The options on this page of the Report Wizard are used to amend the appearance of Performance Data Series included on the report.

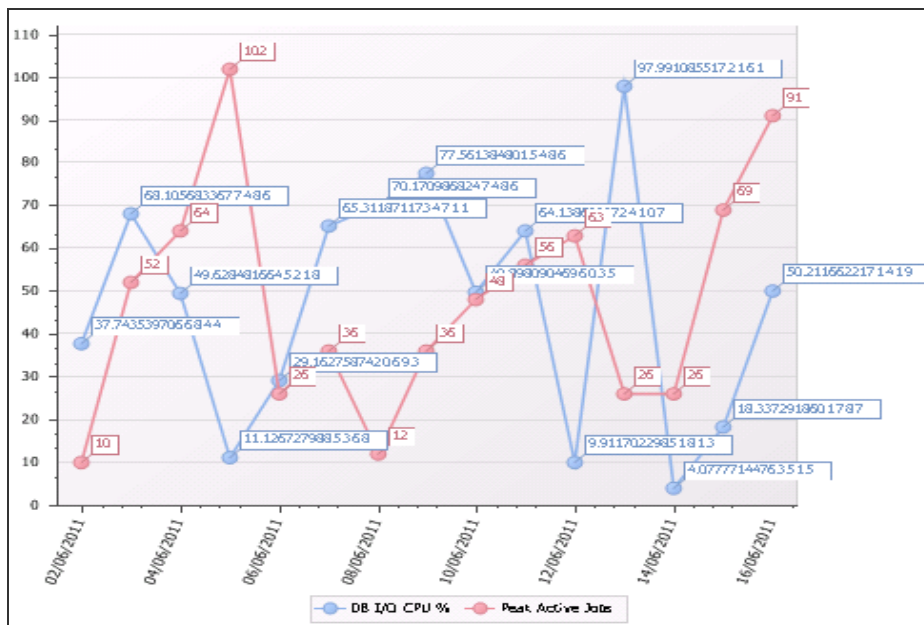
A series is an instance (individual record) of the selected Performance Data field.

**NOTE:** Be careful how you apply the settings on this page as reports can easily become cluttered with too much information and can become difficult to interpret.

### Series Options section

#### Show Series Labels

This option allows you to display the precise value of each instance of Performance Data for each field included on the report. An example screen shot is shown below:

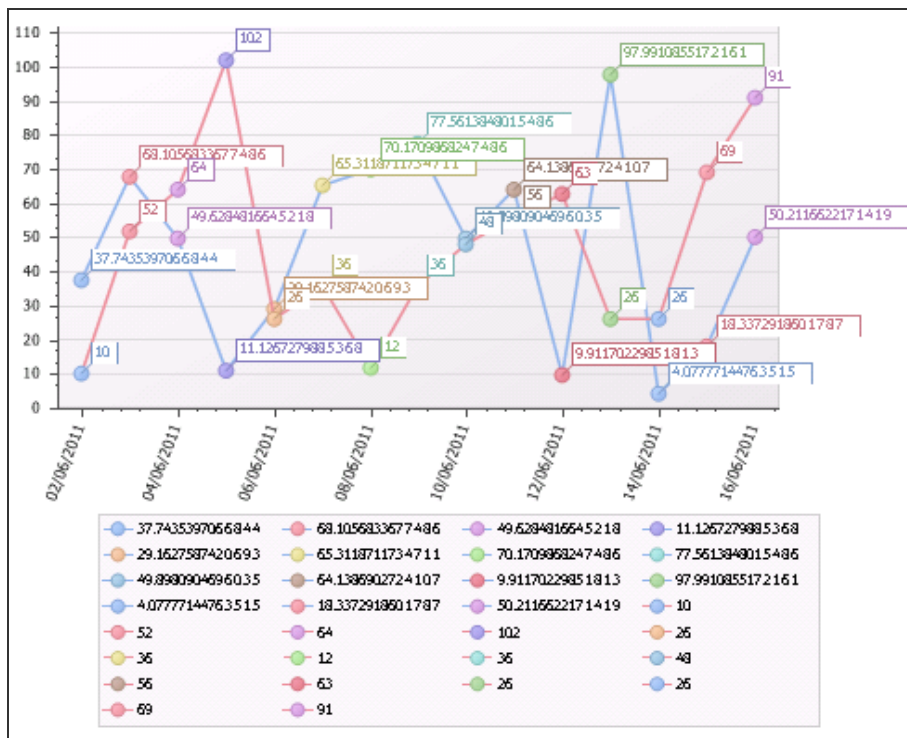


## Show Each Series In A Different Color

This option allows you to display each instance of the Performance Data for each field included on the report.

This means that every point on the report is displayed in a different color, not each performance field. These are controlled on the Chart Options Page.

The following screen shot shows the impact of using a different color for each series and the resulting legend that is generated:



## Series Appearance section

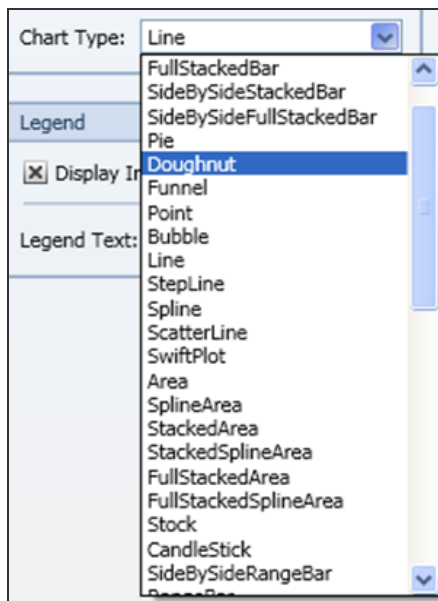
For each Performance field listed on this page it is possible to define the appearance of each series within the field. Please note that if reporting on more than one Performance field on a single report it may not be possible to combine two differing series appearance styles.

To set the Series Appearance, first select the Performance field from those listed on this display:

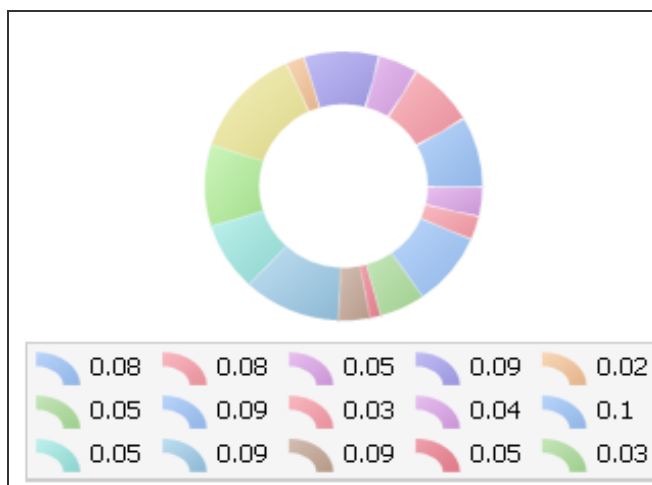
The screenshot shows the 'Series Options' and 'Series Appearance' configuration interface. The 'Series Options' section includes checkboxes for 'Show Series Labels' and 'Show Each Series In A Different Color'. The 'Series Appearance' section includes fields for 'Type' (set to 'Device'), 'Data Item' (set to 'Peak DB I/O CPU %'), and 'Chart Type' (set to 'Line').

In the Series Appearance field, ignoring the Type and Data Item fields which are displayed for informational purposes only, use the drop-down menu to select the chart

type that you wish to use for the series of the Selected Performance field. In this example, the Chart Type of Doughnut is used:



This results in the following change to the report:



Repeat as required for other listed Performance Data fields.

## Legend section

### Display in Legend

This option, enabled by default, displays the series legend for each Performance Data field for which the setting is specified.

## Legend Text

If you wish text, other than the name of the Performance Data field, to appear in the chart legend, you can enter the alternative text in this field.

When you have completed the Chart Series options click **Next** to continue, or if you have no Performance fields that use Tables to display data, click **Finish** to create the report template and exit the Report Wizard.

## Report Wizard Step 8 - Table Appearance

The following settings are used to determine the appearance of any table-based data (as defined on the second page - Available Fields of the Report Wizard) that you are including in your report.

### Table Header Appearance

These settings change the appearance of the Table Header (not the actual data) within the report. Any changes made can be seen on the test report within the Preview Panel.

### Style

There are six different pre-defined 'house' styles that you can apply to the performance fields. Once applied, you can view the change in appearance within the Preview Panel.

The following styles can be applied:

- NormalStyle
- PageHeaderStyle1
- PageHeaderStyle2
- TableEvenStyle
- TableHeaderStyle
- TableOddStyle

### NormalStyle

Leaves the current formatting style unchanged.

Device Name
-------------



## PageHeaderStyle1

Changes the current style to bold text.



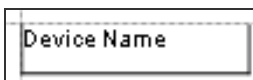
## PageHeaderStyle2

Changes the current style to bold, italic, underlined text.



## TableEvenStyle

Changes the current style to normal text, top-left aligned within a table cell.



## TableHeaderStyle

Changes the current style to Inverse text, center-aligned within a table cell.



## TableOddStyle

Changes the current style to normal text, top-left aligned within a shaded table cell.



## Repeat Column Headings On Each Page

This setting, enabled by default, allows you to print the column headings on each page of the report.

## Table Appearance

These settings determine how the data is presented within the table. You can select different settings for even and odd rows so that the data within the table is easier to read.

The table data settings are the same as those used for the table header. The following screen shots show a variety of different setting combinations.

<b>CPU %</b>	<b>Peak CPU %</b>	<b>System ASP %</b>	
<b>67.59</b>	<b>87.44</b>	<b>79.61</b>	
76.98	51.21	61.67	
<b>18.52</b>	<b>89.65</b>	<b>39.89</b>	
69.35	16.96	57.74	
<b>44.46</b>	<b>62.85</b>	<b>34.40</b>	
63.41	3.35	45.58	
<b>4.08</b>	<b>18.50</b>	<b>73.30</b>	
38.92	68.51	80.48	
<b>49.61</b>	<b>43.31</b>	<b>31.99</b>	
86.76	54.24	5.66	
<b>35.56</b>	<b>90.58</b>	<b>46.35</b>	
99.64	58.59	43.73	
<b>21.85</b>	<b>20.11</b>	<b>57.63</b>	
15.73	53.77	9.64	
<b>11.15</b>	<b>74.04</b>	<b>85.43</b>	

### Styles Used:

- **Table Header:** PageHeaderStyle1
- **Even Style Name:** PageHeaderStyle1
- **Odd Style Name:** Normal Style

<u><b>CPU%</b></u>	<u><b>Peak CPU%</b></u>	<u><b>System ASP%</b></u>	
67.59	87.44	79.61	
76.98	51.21	61.67	
18.52	89.65	39.89	
69.35	16.96	57.74	
44.46	62.85	34.40	
63.41	3.35	45.58	
4.08	18.50	73.30	
38.92	68.51	80.48	
49.61	43.31	31.99	
86.76	54.24	5.66	
35.56	90.58	46.35	
99.64	58.59	43.73	
21.85	20.11	57.63	
15.73	53.77	9.64	
11.15	74.04	85.43	

## Styles Used:

- **Table Header:** PageHeaderStyle2
- **Even Style Name:** TableEvenStyle
- **Odd Style Name:** TableOddStyle

When you have completed the Table Appearance options click **Next** to continue.

## Report Wizard Step 9 - Table Columns

The settings on this page determine the format of the headings and data within the columns included on the report.

For each Performance Data field that is specified in tabular format and as listed within this display, you can set the text for the column heading as well as specifying the numerical format of the column data.

The screenshot shows the 'Report Wizard Step 9 - Table Columns' interface. On the left, there is a list of Performance Data fields: 'CPU %', 'Peak CPU %', and 'System ASP %'. 'Peak CPU %' is selected. On the right, the 'Column Appearance' panel is displayed, showing settings for the selected field: 'Type' is 'Device', 'Data Item' is 'Peak CPU %', 'Header Text' is 'Peak CPU %', and 'Format' is '{0}'.

From the panel on the left of this display, select the Performance data field for which you wish to apply the column formatting.

The **Type** and **Data Item** fields are provided for informational purposes only.

To change the Column Header text from the name of the Performance field, type the required text into the **Header Text** field. The text entered here then replaces the name of the Performance Field for each column of this type included on the report.

Use the **Format** field to specify the integer length of each series within the Performance data column. Each format must be prefixed with {0:} in order to achieve the required result. The following are examples of how you may want to format integers.

- {0:0} produces a rounded figure with no decimal places, e.g. 48
- {0:00.00} produces an integer in double digit format to two decimal places, e.g. 10.56 or 09:44

- {0:00.00000} produces an integer in double digit format to five decimal places, e.g. 10.56734 or 09.44927

When you have finished defining your table columns, the Report Wizard is completed. Click **Finish** to close the Report Wizard and generate the Report Template with the chosen options.