



# Pharos 8.1 New Features

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This document describes the new features, improvements, and other changes introduced in Uniprint 8.1.

## Introduction

Uniprint 8.0 introduced new features focused on enterprise deployments and improved usability. These included the server offline mode (where a service can continue to operate even if the central server is unavailable) and the new Administrator framework.

Uniprint 8.1 continues to build on these features with emphasis on performance. This includes both application performance as well as installation and administration tasks.

Uniprint 8.1 further utilizes the capabilities of this new administration framework, offering new administration contexts to make your tasks easier, faster and more intuitive. Also, based on customer feedback, the Remote administration tool now uses this same administration framework for a consistent, responsive, and easy to use experience.

The following list highlights key new administration features:

- Improved performance of the new administration framework.
- A new Pharos Remote application built on the new administration framework. This replaces the Web Remote application introduced in Uniprint 8.0.
- A new Output Management Overview context which graphically illustrates how your print environment is configured.
- A new Print Configuration Assistant to assist importing existing print servers (or a set of queues) in the Uniprint solution.
- Properties are now shown in a single grid (with no tabs). Each field provides a detailed description of its purposes and how it relates to other fields.
- For contexts that can show a large amount of information, these contexts now share a common filtering framework. The framework simplifies how you create a filter, while offering increased flexibility.
- Contexts now support selecting multiple objects and applying a bulk change or action to the selected objects.
- Plus many more other improvements to simplify your daily tasks.

Uniprint 8.1 includes the following new features:

- Performance and stability improvements to the Print Server service to support large scale deployments

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- Jobs containing color have their cost calculated based on whether or not the target device supports color.
- Improved support for Advanced Printing Features such as Booklet and N-up attributes
- Improved support for page counting EMF and Canon UFR II
- Improved support for Copy Printer Settings. This is used by Popup packages to automatically set the default printer settings when a user adds a package to their machine (e.g. set the printer settings to duplex and grayscale printing).
- The Pharos Station and Popup Client now support the JAWS screen reader for ADA compliance.
- The installer will now create the Pharos database on a remote SQL server (i.e. where SQL Server is hosted on a different box from the Pharos Database service).
- Other installer changes – see below.
- New billing gateway for the NuVision billing system
- Updated billing gateways for the CBORD Odyssey and CS Gold billing systems
- Support for the new SmartCentric card reader connected to PC Pharos Stations
- New integration for the BOSCOPE network devices, including the BOSCOPE Alpha

Uniprint 8.1 includes support for the following platforms:

- Windows 2008 R2
- Windows 7
- SQL 2008 Express edition or better
- Active/Passive Windows Clustering

For the full list of supported platforms, please refer to the Platform Support section below.

## Platform Support

The following section details the full list of supported platforms for each component type.

### Supported Server Platforms

The server components of Uniprint, Off-The-Glass, and SignUp support the following platforms:

- Windows Server 2003 Standard Edition and Enterprise Edition
- Windows Server 2008 Standard Edition and Enterprise Edition
- Windows Server 2008 R2 Standard Edition and Enterprise Edition
- Windows Vista Business Edition, Enterprise Edition, and Ultimate Edition
- Windows 7 Business Edition, Enterprise Edition, and Ultimate Edition

*Limitations:*

- The SignUp Nerve Center is not supported on Windows Server 2008 R2.

### Supported Client Platforms

#### PC Pharos Station

The PC Pharos Station supports the following platforms:

- Windows XP Professional Edition
- Windows Vista Business Edition, Enterprise Edition, and Ultimate Edition
- Windows 7 Home Basic Edition, Home Premium Edition, Business Edition, Enterprise Edition, and Ultimate Edition
- Windows Server 2003 Standard Edition and Enterprise Edition
- Windows Server 2008 Standard Edition and Enterprise Edition
- Windows Server 2008 R2 Standard Edition and Enterprise Edition

#### Popup Client

The Popup Client supports the following platforms:

- Windows 2000 Professional Edition and Server Edition
- Windows XP Home Edition and Professional Edition
- Windows Vista Home Basic Edition, Home Premium Edition, Business Edition, Enterprise Edition, and Ultimate Edition
- Windows 7 Home Basic Edition, Home Premium Edition, Business Edition, Enterprise Edition, and Ultimate Edition
- Windows Server 2003 Standard Edition and Enterprise Edition
- Windows Server 2008 Standard Edition and Enterprise Edition

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- Windows Server 2008 R2 Standard Edition and Enterprise Edition
- Mac OS X 10.4 - 10.6 (PowerPC and Intel)

### SignUp Client

The SignUp Client supports the following platforms:

- Windows 2000 Professional Edition
- Windows XP Professional Edition
- Windows Vista Home Basic Edition, Home Premium Edition, Business Edition, Enterprise Edition, and Ultimate Edition
- Windows 7 Home Basic Edition, Home Premium Edition, Business Edition, Enterprise Edition, and Ultimate Edition
- Mac OS X 10.4 – 10.5 (PowerPC and Intel)

### Supported Database Engines

- Microsoft SQL Server 2000
- Microsoft SQL Server 2005 Express edition or better
- Microsoft SQL Server 2008 Express edition or better

For all versions of SQL Server, ensure you have the latest SQL Server service packs applied.

## Support for specific hardware configurations

### 64-bit support

The server components will support 32-bit and 64-bit versions of Windows Server 2003 and Windows Server 2008. The Popup Client and Pharos Station will both support 32-bit and 64-bit versions of supported Windows operating systems. The SignUp Client supports 32-bit only; it does not support 64-bit versions of the Windows operating system.

**NOTE** – Pharos components are not officially supported on VMware 64-bit virtual machines due to hardware compatibility issues with these virtual machines.

### Cluster server support

Uniprint 8.1 now supports installing Pharos Server components on an active/passive Windows Cluster (Windows Server 2003 and Windows Server 2008). Active/active cluster configuration is not supported in this version. New tools have also been added to simplify configuration of Cluster services.

## JAWS Screen Reader support

In compliance with the Americans with Disabilities Act (ADA), Uniprint 8.1 has been designed to work with Job Access with Speech (JAWS) for Windows screen reader. This provides blind and visually impaired users easier access to the Popup Client and Pharos Station. Using the JAWS software, relevant information from the Popup Client and Pharos Station screens are read aloud to the users and actions are accomplished through keyboard interaction.

At a Popup Client, JAWS guides user by reading out relevant information to the user which includes standard username, password and job name questions, standard job information and custom questions.

At a Pharos Station, the JAWS software guides users by reading the screen information on the Welcome screen, Logon screen, and Releasing Print Jobs screen. This enables visually impaired users to pay for and release their print jobs without assistance.

## Changes to Third-Party Integrations

### Changes to CBORD Gateways

New versions of the CBORD Odyssey and CS Gold gateways are now available. Please refer to <http://www.pharos.com/Documents/Product-Notices/PPN-JUN08-Gateways-CBORD-and-Diebold.pdf> for more information. To obtain the latest copy of the applicable CBORD gateway, please contact Pharos Support. Billing gateways are a chargeable item; the billing gateway must be enabled in your license key for the service to start.

### New NuVision Gateway

A new gateway has been created allowing Uniprint to integrate with the NuVision iAMECS system. To obtain the latest copy of the NuVision gateway, please contact Pharos Support. Billing gateways are a chargeable item; the billing gateway must be enabled in your license key for the service to start.

### New BOSCOPE Translator

The old Virtual Cash (VCC) integration embedded in the Pharos Print Server has been removed. It has been replaced with a new BOSCOPE Translator. If you use VCC or BOSCOPE devices, please obtain the latest copy of the BOSCOPE Translator from Pharos Support before upgrading to Uniprint 8.1. You will also need an updated license key as the new translator requires a license for each VCC or BOSCOPE device.

### New SmartCentric Cash Card Reader Integration

A new cash card reader DLL is available for the PC Pharos Station allowing it to connect to the new SmartCentric cash card reader.

## Changes to Administration Tools

### Changes to Pharos Remote

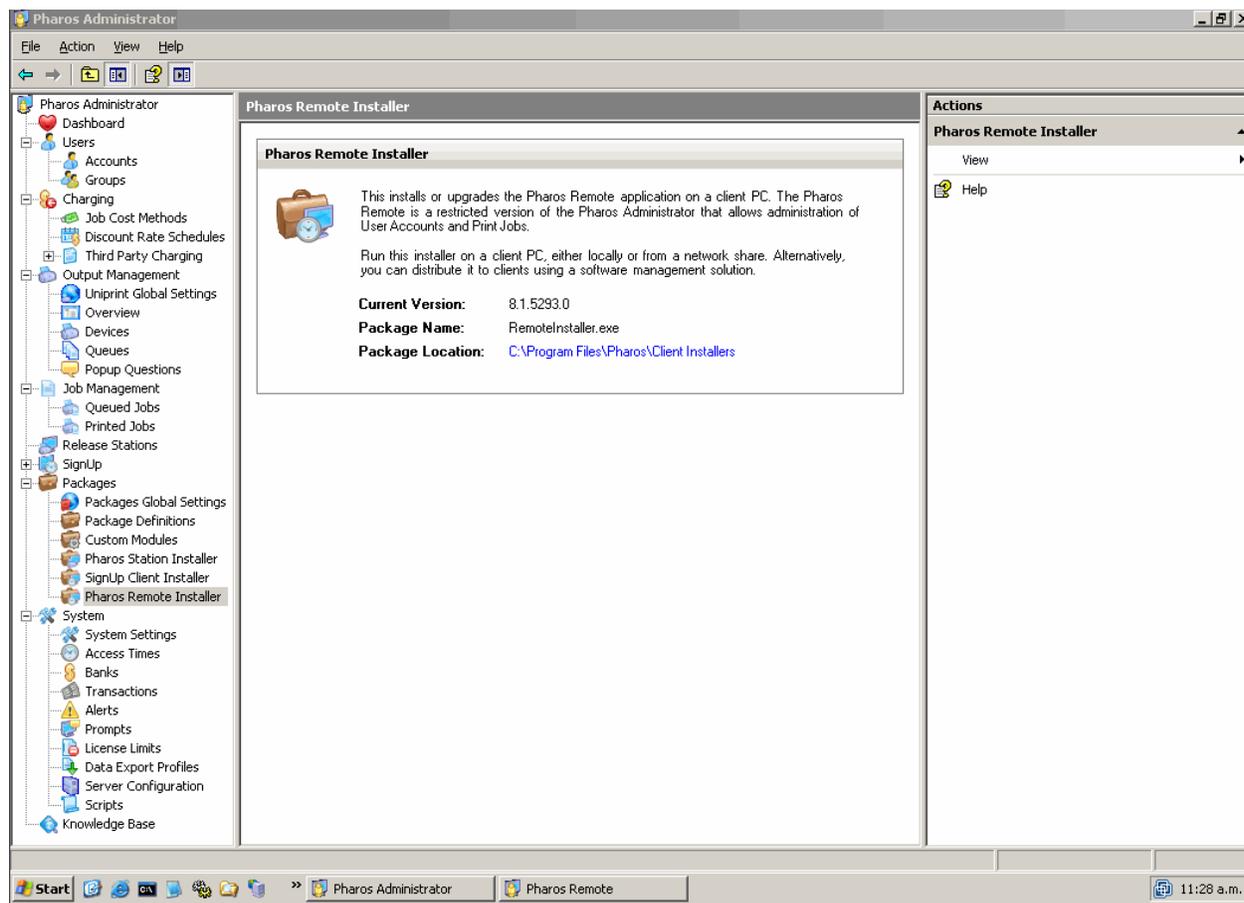
Based on customer feedback, the Uniprint 8.1 Remote has been re-developed using the same UI framework as the Administrator. This offers a consistent UI experience between the Administrator and Remote. In addition, you gain the benefits of the performance and usability of the new UI framework.

Web Remote is no longer available in Uniprint 8.1. When upgrading a Uniprint 8.0 installation to Uniprint 8.1, the Web Remote components will be automatically removed.

### Distribution and Installation

The Uniprint 8.1 Remote is installed using a package (similar to the PC Pharos Station package). It can be installed on Microsoft Windows XP, Microsoft Windows Vista, Windows 7, Microsoft Windows Server 2003, and Microsoft Windows Server 2008.

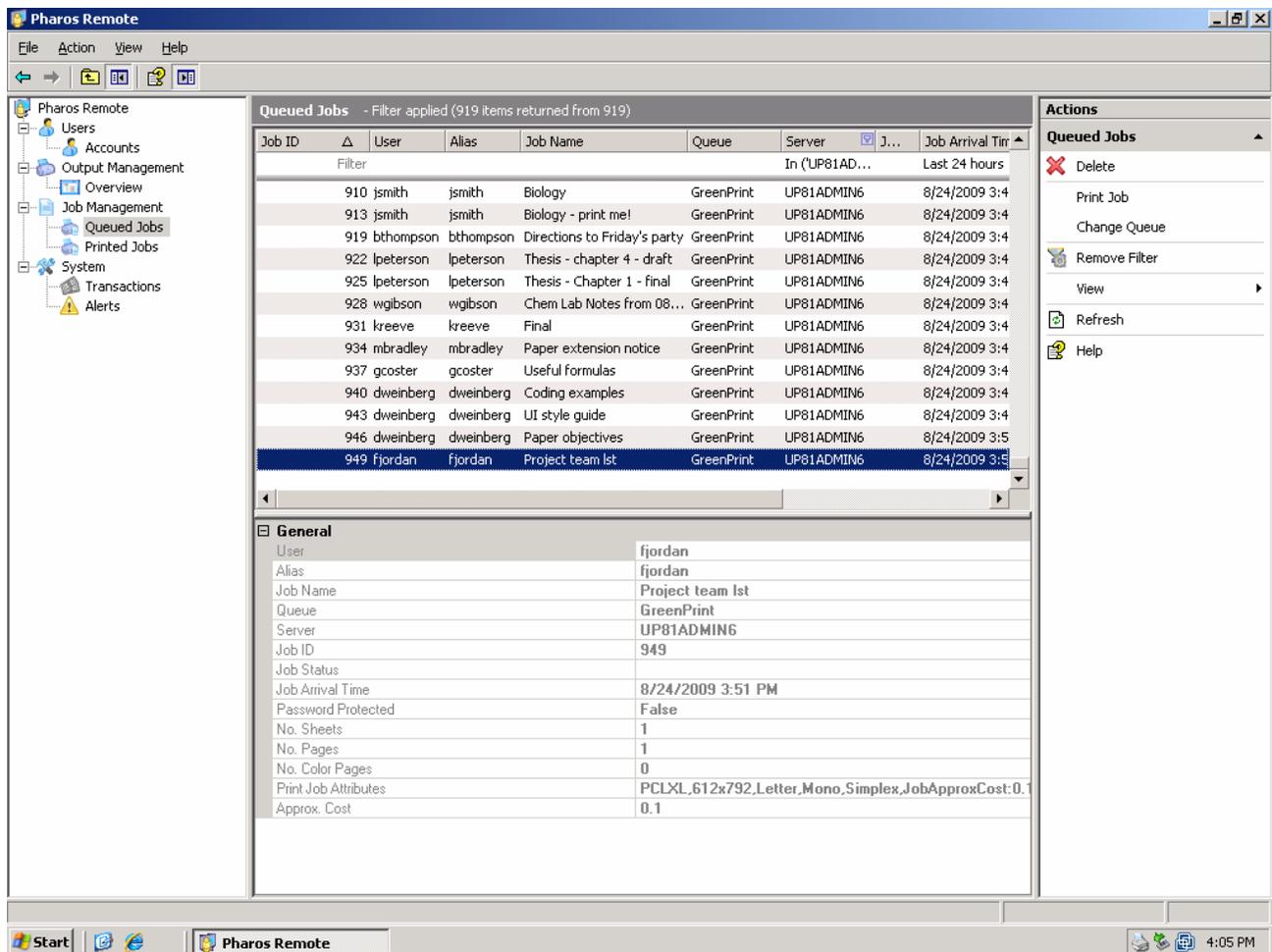
The Remote can be installed on machines with other Uniprint components, including the Administrator. A user must have at least Proctor access rights to use the Pharos Remote.



## Remote functionality

The Remote continues to offer the standard set of features including:

- User account management
- Review of user transaction
- Review of alerts
- Job management
  - Viewing job details, including number of pages and cost
  - Moving jobs between queues
  - Moving jobs between printers
  - Moving jobs from a queue to a printer
  - Moving jobs from a queue to a printer, while still charging the user account
  - Re-printing recently printed documents



## Changes to Pharos Administrator

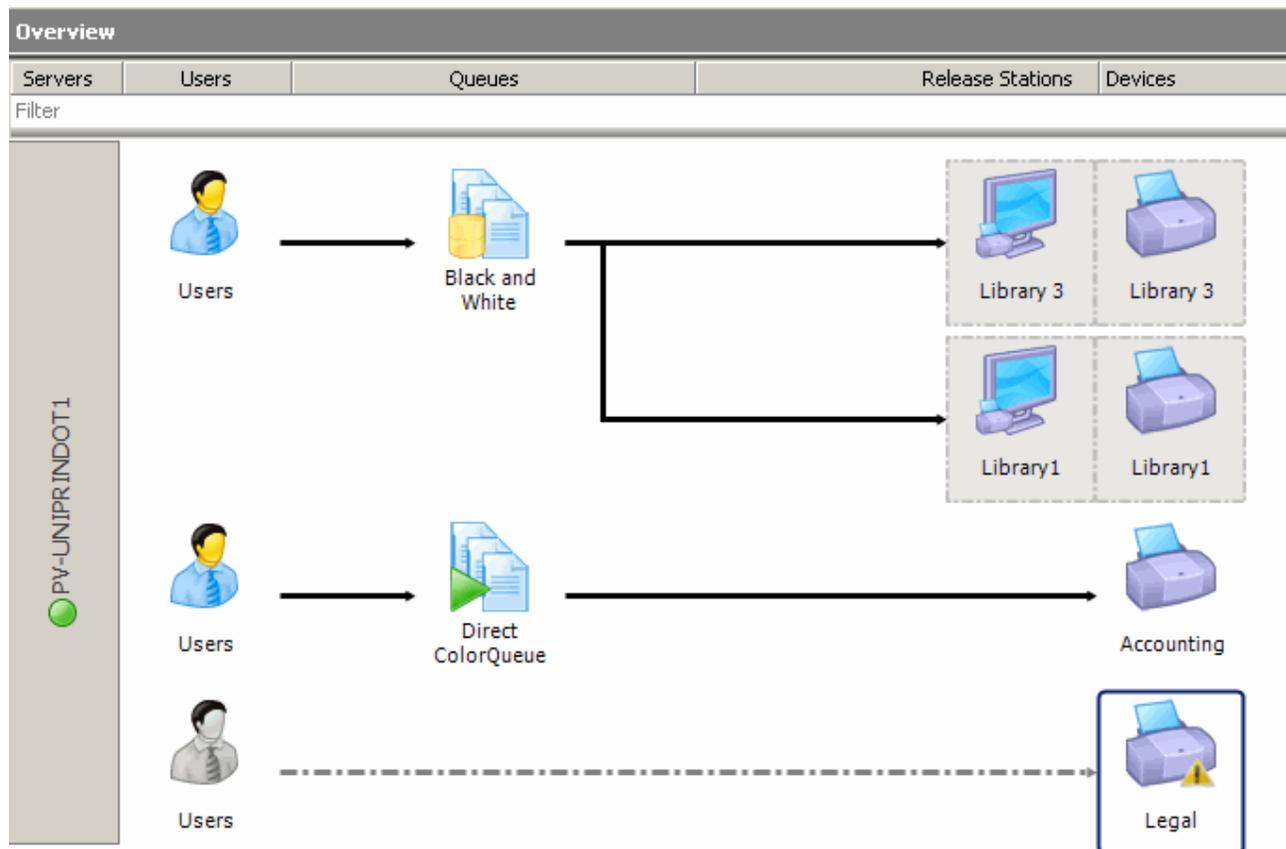
The Pharos Administrator management application has been re-organized and enhanced to improve user experience. It includes the following new features:

### New Output Management Overview

A new Overview section has been added to the Output Management context. This section displays a graphical representation of your printing environment. The visual diagram represents the environment from an end user's perspective, i.e. if I print my document to this queue, what will happen and where can it be collected? It shows, at a glance, how your devices, queues and release stations are connected to each other.

The Overview context allows you to configure your Uniprint environment from one screen. You can create new objects and simply join objects together by dragging and dropping. The context also provides information on next configuration steps (e.g. a queue requires a device) as well as configuration issues (e.g. print driver mismatches). If a configuration error is detected, the object's icon will show a warning or error icon. Simply hover the mouse cursor over the object's icon to view a detailed description related to the error.

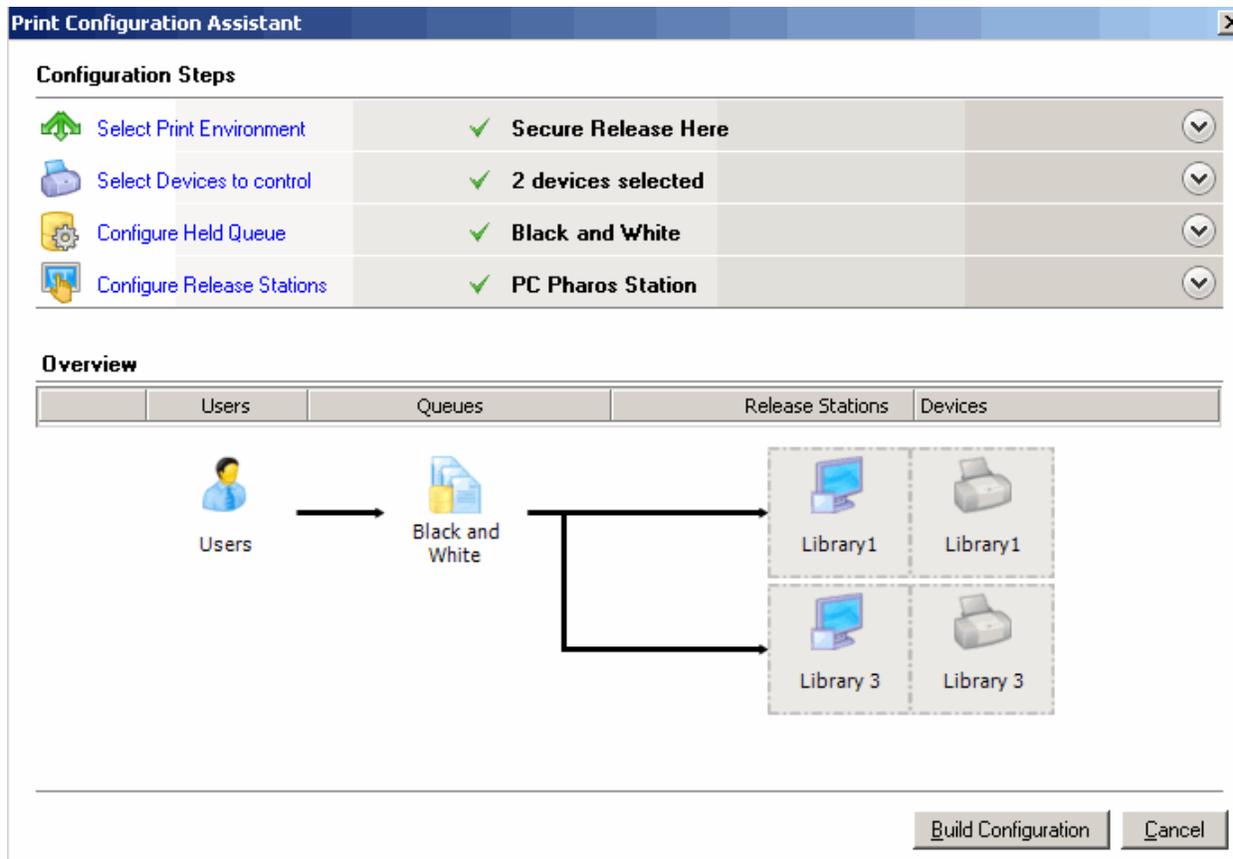
The context also supports filtering so that you can focus the diagram on an object of interest (e.g. show me the different ways a print job can be sent to a particular printer). The diagram can also be exported to a file so you can distribute it to other staff or students.



## New Print Configuration Assistant

The Configurator Wizard from earlier versions of Uniprint has been removed and replaced by a new Print Configuration Assistant. The new Assistant greatly simplifies the task of initially configuring a printing system. Using an intuitive workflow, the Assistant guides users through all the steps in creating a print environment from scratch, easily converting a print server and its existing queues into the desired Uniprint configuration.

Moreover, an Overview section is included to show a pictorial representation of how the system will ultimately be configured after completing all the configuration steps.



The Print Configuration Assistant action is available in the following contexts of the Pharos Administrator:

- Output Management: Overview, Devices and Queues.
- Release Stations

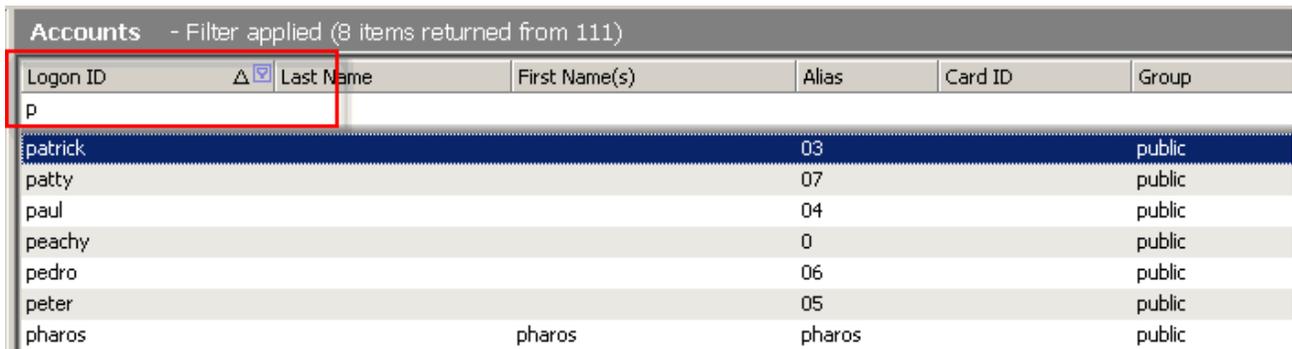
## Remote functionality

Now that the Pharos Remote uses the same administration framework as the Pharos Administrator, all of the Remote contexts (i.e. Queued Jobs and Printed Jobs) are now also available in the Pharos Administrator.

## Improved Record Filtering

The administration tools now include an “inline” filtering mechanism which allows you to easily apply filter criteria in a context; this new filtering mechanism is available in the majority of administration contexts.

Any grid can be filtered by typing a search term into the filter box found underneath the column headers.



Logon ID	Last Name	First Name(s)	Alias	Card ID	Group
p					
patrick			03		public
patty			07		public
paul			04		public
peachy			0		public
pedro			06		public
peter			05		public
pharos	pharos		pharos		public

In addition, Uniprint 8.1 also includes a Custom AutoFilter which allows you to specify complex filter criteria consisting of one or two filter conditions using comparison operators (such as equals, like, greater than, less than or equal to and so on), and the logical operators AND and OR.



Custom AutoFilter

Show rows where:

Job Name

equals

And  Or

OK Cancel

## Improved Property Editing

Uniprint 8.1 introduces a new property grid window which displays properties of an object in a more consistent way, all on a single screen. The property grid window replaces the old tab view used to edit properties in previous versions of Uniprint.

With Property grid Window, you can display and edit records directly from any of the Pharos Administrator contexts by selecting the desired record in the List Window. Selecting a record from the List Window displays a set of all the properties for the selected record.

Property grid window uses tooltips and informational messages to give users extra information, e.g. description about a specific property. To view a description of a property, simply hover the mouse over the property's name.

<b>General</b>	
Name	Library 2
Active	Yes
Device Functions	Print
Access Time	Unrestricted
Activity Summary	
<b>Printer</b>	
Print Server	PV-UNIPRINDOT1
Reprint Holding Period (Minutes)	0
Job Attributes	
Printer Type	Color
Release Stations	Library 2
Related Queues	BlackWhiteQueue
Speed	1
<b>Windows Printer Settings</b>	
Driver	Lexmark 1020 Color Jetprinter
Port	fiction
Print Processor	WinPrint
<b>SNMP Settings</b>	

In addition, the property grid window also facilitates editing of multiple items.

## Multiple Selection of Objects

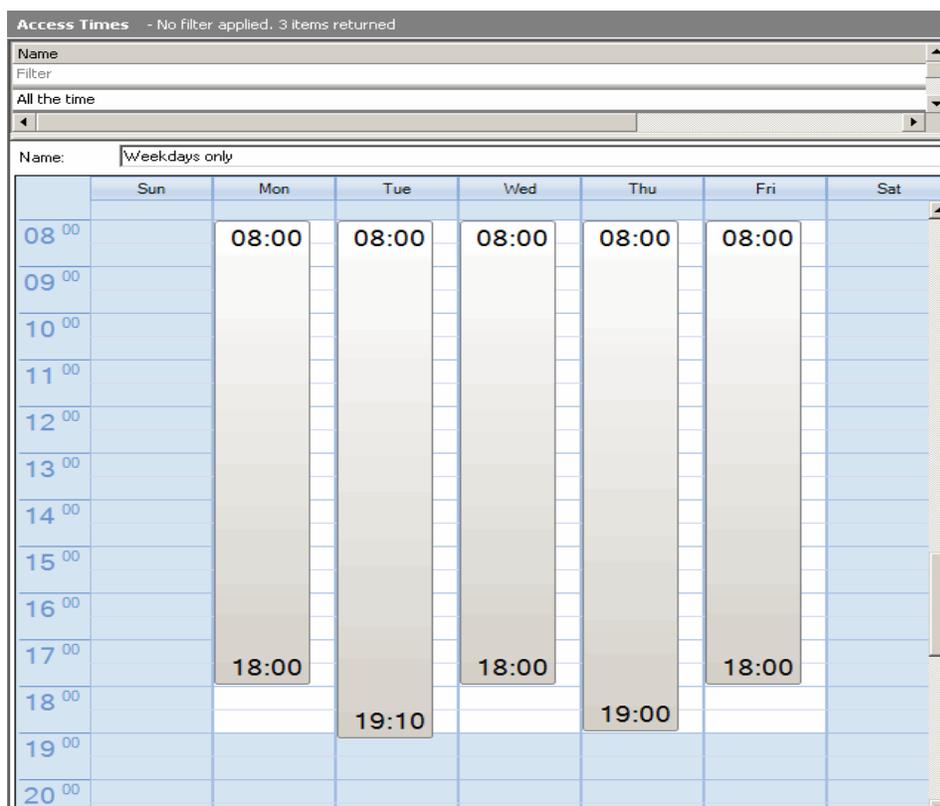
Uniprint 8.1 now allows you to select multiple objects and edit the properties of these objects simultaneously. You can select multiple objects by using the Windows standard mouse click shortcuts (i.e. SHIFT or CTRL).

When multiple items are selected from a List Window, the corresponding Property grid window displays only those properties that can be edited for all selected items. This is updated dynamically as the main grid selection changes. Furthermore, the property grid displays property values where all selected items have the same value, or an empty field where the values are different. In either case, users can edit the information to set a new value for all selected objects.

## Simplified Access Times configuration

The process of configuring Access Times has significantly been improved and simplified in Uniprint 8.1. In previous versions of Uniprint, an Access Timetable dialog is used to change the available times in an access schedule. To set up a schedule, you have to select each day of the week and configure the Start Time and End Time for each day.

In Uniprint 8.1, a calendar grid view is now used to configure and display Access Times schedule. In this view, weekdays are displayed as columns while the timeline appears as rows. Using this view, you can set up access schedule by simply clicking the cell that corresponds to the desired start time and dragging the mouse pointer to set the end time creating a time block.



## EDI Verification Tool integrated into Administrator

Uniprint uses the EDI Verification Tool to verify the status of the Pharos EDI Service. This tool runs a short series of tests to check that the EDI is functioning correctly. In previous versions of Uniprint, this tool was a standalone tool which can be run at any time from the Start menu (**Programs > Pharos > Pharos EDI Verification**).

In Uniprint8.1, the EDI Verification Tool is now integrated with the Pharos Administrator. The EDI status is checked automatically every 30 seconds; the results of the tests can be viewed from the **System > Server Configuration** context of the Pharos Administrator.

## Other Changes to Pharos Administrator

The Administrator interface has been re-organized and enhanced to simplify configuration:

- The Wizard style of inserting new objects has been removed in Uniprint 8.1. New objects are now inserted using dialogs with a minimal set of fields. For example, all insert dialogs display all information on a single dialog screen, which means no Next/Previous buttons are required.

Certain screen and sections in Pharos Administrator have been added and/or improved in this release:

- **Pharos Remote Installer** context has been added to the **Packages** group.
- **View User Transactions**, **View User Queued Jobs** and **View User Printed Jobs** actions have been added to the **Users > Accounts** context.
- Batch User Archive has been added to the Batch Operations action on the **Users > Accounts** context.
- **Insert Rate Break** and **Delete Rate Break** actions have been added to **Charging > Discount Rate Schedules** context.
- **Display in Overview**, **Print Configuration Assistant** and **Restore Windows Printer Settings** actions have been added to the **Output Management > Devices** and **Output Management > Queues** contexts.
- When adding queues or devices to a remote print server, the Administrator now passes the spooler request to the Pharos Print Server over TCP/IP. The Administrator no longer needs to connect to the spooler using WMI.
- A new **Job Management** group has been added in the context tree. It includes the **Queued Jobs** and **Printed Jobs** contexts.
- The **Charging > Job Costs Methods** context includes a new attribute configuration interface.
- A new **Import iCalendar** action has been added to **SignUp > Holidays** context. This action allows you to import Holiday data in iCal format (.ics) into your Holiday schedule.
- EDI service password is now stored in the database and is now visible in the Administrator on the **System > System Settings** context.
- **Packages Global Settings** is now a sub-context under **Packages**.
- The **System > License Limits** context now lists all standard license fields, including the site code.
- The **System > Server Configuration** context now lists all services including the EDI and LPD server. For each service, the Administrator will periodically test that they are responding; these tests are now performed using standard TCP/IP communications (previous versions used WMI which required correct Windows permissions to operate).

Several Administrator contexts have been re-organized and/or renamed:

- Third Party Charging
  - All Third-Party Charging configured is located under **Charging > Third Party Charging** group.
  - In previous versions, Charging Models, Categories and Cost Centers Contexts were arranged in a tree view. In Uniprint 8.1, a single context screen displays all Charging Models, Categories and Cost Centers. The data grid shows Cost Centers grouped by Charging Model and Category. Properties for Charging Models, Categories and Cost Centers are all edited from this view.
  - The Charging Model Import/Export Profiles have been updated. The new profiles support imports from files, but not ODBC data sources.

- Queues
  - The **Output Management > Spool Queues** context has been renamed to **Queues**.
  - On a queue, you set the Queue Type to “Spooled” for Secure Release Here. The term “Spooled” has been renamed to “Held” for clarity.
- Popup Questions and Popup Question Groups has been removed and replaced with a single **Popup Questions** context. This context is located under **Output Management** group.
- Pharos Stations and Network Terminals contexts have been replaced with a single **Release Stations** context. Furthermore, **Show Advanced Properties**, **Clone Release Stations**, **Display in Overview** and **Print Configuration Assistant** actions have been added to the **Release Stations** context.
- In previous versions, Branches were arranged in a tree view where each branch is displayed as a node on the Context Tree. Computer Groups, Computer Types and Computers specific to a branch are shown as sub-contexts below each Branch. In Uniprint 8.1, Computer Groups, Computer Types and Computers are now sub-contexts under SignUp and are grouped by Branch.
- **Launch Pharos Print Map Builder** action found in the **Package Definitions** context is now called **Pharos Print Map Builder**.
- The **Prompts** context no longer uses a tree view. It groups prompts by type in a single view.
- **Packages Global Settings** is no longer available in the Package Definitions context; it is now under the **Packages** group.

## Print Server Changes

### Print Server performance and stability improvements

Print Server is now significantly faster in environments with large number of spooled jobs. The Print Server now internally tracks the list of jobs held in the spooler. When a list of jobs is required to be displayed to the end user, they are fetched from the print server cache. This dramatically improves performance for sites that manage a large number of held jobs with a small number of queues.

### Changes to BW and Color Charging

In the previous versions of Uniprint, charging for B&W and color was determined by the Queue’s “Printer Type”. This could cause issues in certain configurations where a color print job would have an incorrect cost applied. For example, an environment is configured to have a color queue; jobs held on the color queue are also available at B&W only printers. If a user submitted a color job to this color queue and then released it at a B&W only printer, the user would still be charged for a color job.

In Uniprint 8.1, the charging engine has been updated to handle this scenario. The final cost of a print job is determined based on the actual output device. If the job contains color pages, but the printer is B&W only, the user will be charged for B&W printer only.

When upgrading from earlier versions, it is important to verify that the “Printer Type” setting on each device is correct (as this setting now impacts costing). You can verify the setting on the **Output Management > Devices** context. In addition, the “Printer Type” setting has been removed from Queues as it is no longer necessary.

## User Anonymity

Uniprint 8.1 now includes a feature to optionally anonymize user data, which helps prevent sensitive user information from being exposed in specific Administrator contexts such as transactions and alerts as well as reports. This is useful for environments that require Uniprint features (e.g. job tracking, Secure Release Here), but cannot associate activity with a particular user.

A new security setting called “Anonymize User Data” has been added to the General section of the **System > System Settings** context. If enabled, user identifiers (such as logon id or card id) are removed from transactions and alerts.

## Improved support for Advanced Printing Features

Support for certain EMF Advanced Printing Features has been improved for UNC printing. Features such as N-up, Watermark and Booklet are now retained through to the printing of the job and can be page counted and charged for.

**Note:** If the printer driver or print processor of the spool queue and the print queue do not match, the Advanced Printing Features data will not be passed to the printer to avoid potential issues with the Windows Spooler. Pharos Popups also supports Advanced Printing Features; however, the job is not submitted in EMF form. It will always be rendered to the driver type in use (e.g. Postscript, PCL) before being sent to the Pharos services.

## Improved support for Copy Printer Settings

The **Copy Printer Settings** option (on the **Output Management > Queues** context) now works with Universal Printer Drivers. In addition, it has been enhanced to also copy the 'Device Settings' from the server queue and apply these when creating a new printer object on a user's workstation (using Popup Packages). This allows you to set the preferred defaults for a queue and have these defaults applied to all users.

**Note:** The printer settings must be defined under **Advanced > Printing Defaults** in the printer properties dialog and not in the Printing Preferences.

## Enforcing Popups on Queues

The setting on queues “Must Use Popups” can now be enabled for Direct and Held (formerly Spooled) queues. When enabled, the Pharos Print Server will only accept jobs that have been submitted from a Pharos package-installed printer. The print job will be accepted whether or not any Popup questions were asked or answered.

## Installation Changes

### New Pre-requisite

Version 3.5 SP1 of the .NET Framework is now required for all the Pharos server components.

### Support for Remote Database Installs

Uniprint 8.1 now supports automatic installation of Pharos Database to remote SQL Servers. This simplifies installations where the Microsoft SQL Server and Pharos Principal Server are on separate servers; it is no longer necessary to have administrative access to the server running the SQL Server instance.

When installing the Principal Server components, you will be prompted for the network name and instance name of the SQL Server.

### Simplified Installers

The main Pharos installers have been simplified and slimmed down. Many screens that requested install information have been removed in favor of sensible defaults.

- The main Pharos installers no longer include billing gateways. The billing gateway installers are available from Pharos Support.
- The installers no longer automatically create and deploy new SSL certificates as they are not required for the new Pharos Remote. The new Pharos Remote secures network traffic using AES encryption.  
If you want to use SSL certificates for the EDI Service, you must request a Pharos-signed certificate from Pharos Support.
- It is no longer necessary to specify an EDI Cashier account in the main Uniprint installers. Instead, a generic "edicashier" user is automatically created; this account will be used for all cashier activities through the EDI Server.

### Pharos Remote

The Remote component has been removed from the main installers. The new Pharos Remote is now installed using self-contained install packages. The Remote Installer packages are located on the Pharos CD in the **clientinstallers** directory, and are installed on Pharos Administrator PCs in the **Program Files\Pharos\Client Installers** directory.

If you are upgrading from Uniprint 8.0, the Web Remote will be automatically removed. Once the upgrade has completed, use the Remote Installer package to install Remote on the necessary machines.

## Removed Features

Certain features have been removed from the Pharos system in this release:

- Activities screen which was designed to guide you through various common Administrator tasks has been removed in Uniprint 8.1.
- The Configurator action has been removed from the **Output Management > Uniprint Global Settings** and **Output Management > Devices** contexts.
- The Setup action that was used to configure the Windows printer device associated with the selected printer is no longer available from the **Output Management > Devices** and **Output Management > Queues** contexts. You can set device properties by right-clicking on a printer entry at **Start** menu > **Settings > Printers and Faxes** and selecting Properties.
- The pstatus tool has been removed from the product. The lpq command line tool offers essentially the same functionality.
- The Virtual Cash network support built into the Print Server has been removed; VCC devices are now supported through the new BOSCOPE integration. In addition, the NTS Tester and BootP relay has been removed in the product. Please contact Pharos Systems for more information.
- SQL List Popup question type has been deprecated. SQL List questions will continue to work when upgrading from Uniprint 8.0 or earlier, but there is no interface in the Administrator to configure them. New customers should use the Cost Center question type or the SQL List feature of Notify instead.
- Some EDI calls have been deprecated (e.g. RunSQL) to improve security. These calls can be manually re-enabled, if necessary, to support older terminals that may still use these deprecated calls.