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1

OVERVIEW

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Introduction

Ericsson Television's WatchPoint® Workflow System provides a scalable, automated solution for platform operators and content providers to efficiently manage the process of digital media creation, management, and distribution to multiple end-user platforms.

Before content reaches consumers, it must navigate a complicated web of software applications, hardware devices, and organizations. Each process participant or external system is designed to perform a discrete job in the overall process, and currently, there is not necessarily a viable communication mechanism to coordinate activities among these heterogeneous process participants. Systems performing work are not able to provide status about their current job while they are completing it. As a result, many organizations resort to manual orchestration, using e-mail notifications or Excel spreadsheets to track progress. These manual solutions render it nearly impossible to automate the end-to-end process and result in inefficient resource utilization. In addition, manual workflow makes it difficult to track statistical data such as external system failure rate, average task durations, and status of the current steps in the process.

The Workflow System has an open architecture design that enables communication among heterogeneous systems, allowing maximum automation and statistical analysis of process efficiencies. The following diagrams illustrate a typical manual workflow system and an automated workflow system.

Figure 1.1: Manual Workflow System

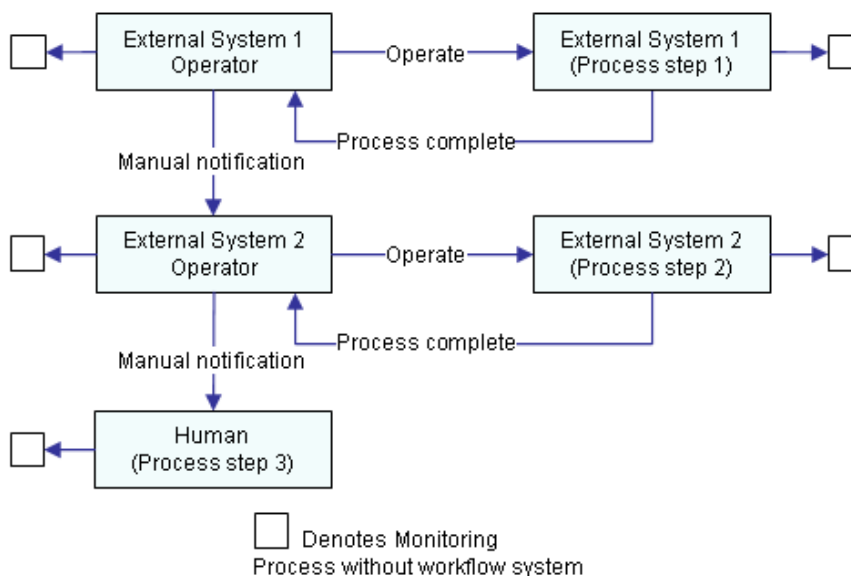
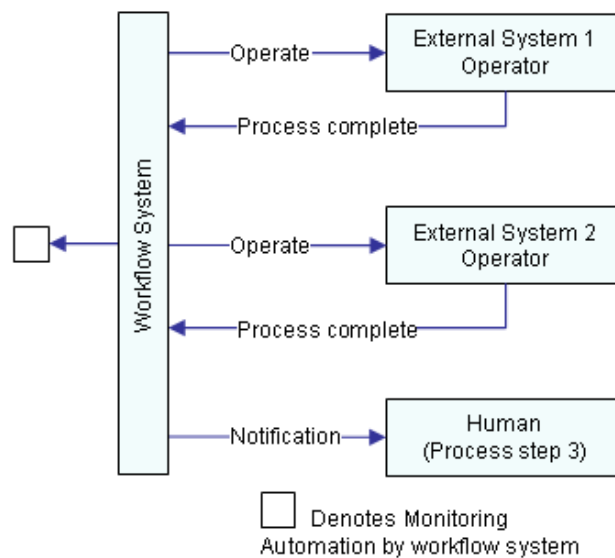


Figure 1.2: Automated Workflow System

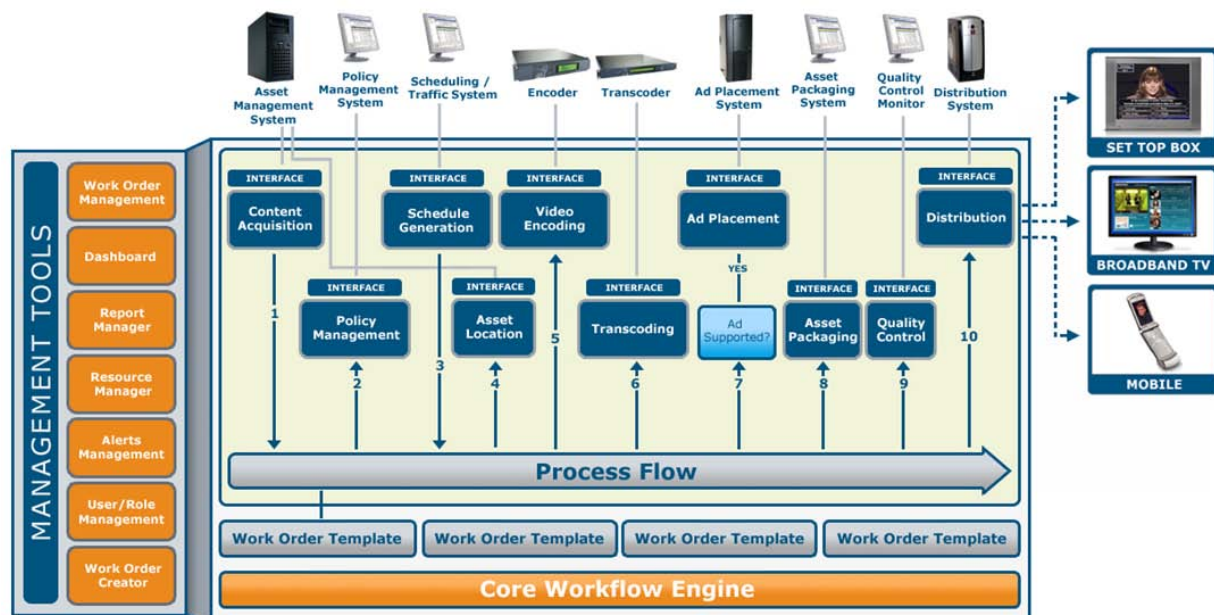


System Overview

This section introduces the various elements within the WatchPoint System.

Figure 1.3: WatchPoint Feature Overview

Example process flow



There are several elements that comprise the complete content management system.

Workflow: *Operational aspect of a work procedure; task structure and relative order, synchronization, information flow, and tracking.*

Tasks: *Actions within a work order template. These can be automatic or manual.*

Work order template: *A formal definition of the business process, including its flow logic, tasks, and resources.*

Resources: *External entities that perform the workflow process.*

Core Workflow Engine

The heart of the WatchPoint Workflow System is the core **workflow** engine, which serves as the orchestrating entity across the workflow process and between the various external systems.

Workflow Templates

WatchPoint uses customizable XML-based workflow templates to define the process that is being managed. A template contains all the **tasks** and processes in the order needed to complete the specific process. A WatchPoint System can be designed to have one or more templates. For example, a template could be designed to handle particular asset types (e.g., movie or trailer) or for delivery to different platforms (e.g., VOD or Mobile). A system could also have one template for an ingest process and another template for a content distribution process.

Templates are ingested into the system and used as a basis to create work orders.

Work Order Management

A work order is a specific instance of a **work order template**. Work orders represent the processes being managed. The work order and any manual tasks are assigned to and performed by the various system resources.

Resource Management

WatchPoint manages the multiple **resources** that perform the various tasks defined in the workflow process. Examples of such systems are asset management systems, transcoders, encoders, ad insertion systems, personnel, and distribution systems. These systems can be Ericsson systems, third-party systems, or in-house systems. WatchPoint interacts with these systems through open interfaces.

WatchPoint includes multiple web-accessible management tools that provide visibility into all the activities and resources being managed. These include a summary Dashboard view of system activities, system monitoring, complete work order management, resource management, user/role management, and reporting.

System Monitoring

WatchPoint includes several monitoring aspects. The Dashboard, which serves as the system home page, displays current status and summary totals of work order processing, current disk usage, resource utilization, system health, and queue status. An alerts system is also present that provides event notification through e-mail or SNMP traps. Visibility into the current directories and files on the content repository is also provided.

2

GETTING STARTED

What's Ahead ...

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About This Document

This user guide provides information about working with the WatchPoint Workflow System.

WatchPoint supports configurable column headings of results. This enables customers to include custom fields used in their specific workflow. Page samples used in this document might vary from your GUI. These differences are limited to results data and do not affect page layout, system functionality, or methods of operation.

Using This Documentation

This section explains conventions used to highlight application features within the document:

- Buttons representing commands and functions are in **bold** type.
- Fields, column headings, and areas requiring user input are in *italic* type.
- Main menu and submenu entries are in **blue** color.
- Links to content in the document, URLs, and web pages are [blue and underlined](#).

Important terms and their definitions are located within the side margins of the main text.

The first section of the User Guide contains general information about the typical functions performed by the system. The main body of the document contains information on how to use the system functions. Appendices are included at the end of the document to further explain some aspects of the system.

Points that require specific attention are highlighted as shown:



User tips have a light bulb graphic to indicate a suggestion or idea.



Notes indicate an item or situation that merits special attention. These items are largely informational or explanatory.



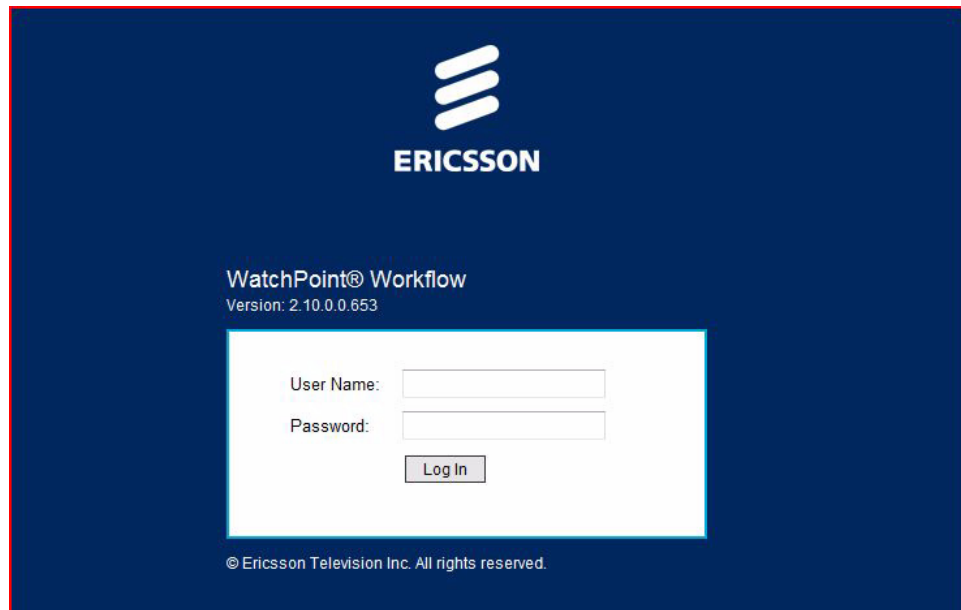
Cautions or warnings describe situations or behaviors that can produce negative results. Of all the points being made, these represent the items that if ignored, can potentially have undesired effects on the system.

Accessing the Interface

The WatchPoint Workflow System is a browser-based solution. To access the GUI, enter the provided URL in the web browser and press **enter** on the keyboard.

A login page is displayed. The WatchPoint product contains a role-based security framework that requires a user to be defined and active to access the GUI.

Figure 2.1: Login Page



After your user name and password are verified, the home page displays.

Becoming Familiar with the Environment

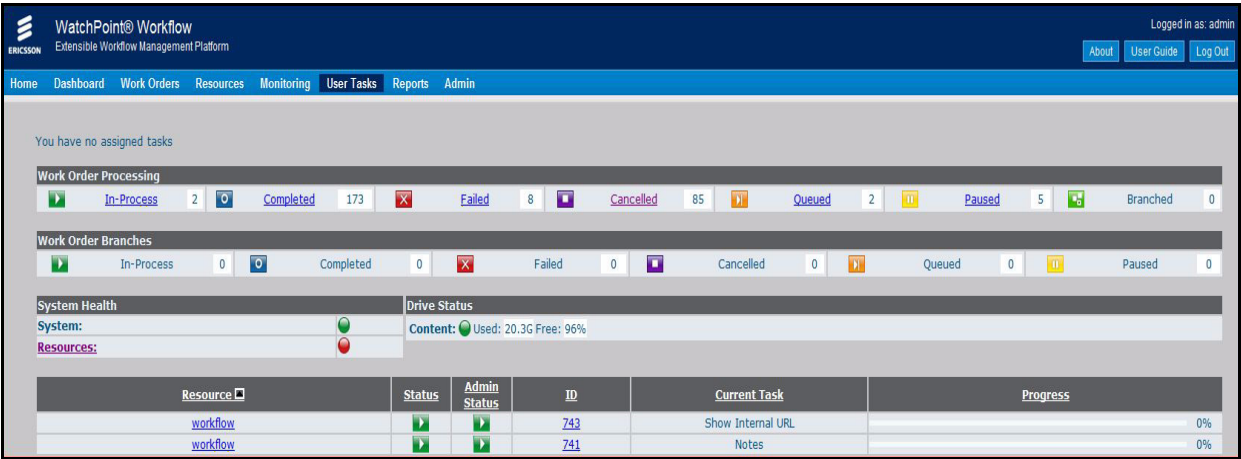
This section helps the user become familiar with the Workflow System environment. It is recommended that new users review this section before working in the Workflow System.

About the Dashboard

The Dashboard serves as the home or start page for the Workflow System. This view provides a quick overview of many of the areas pertaining to WatchPoint. If applicable, any pending tasks assigned to you (as you are identified within the system by your login) and **resources** currently in use are also displayed.

Resources: External systems used to complete a task within a work order.

Figure 2.2: WatchPoint Dashboard



The Dashboard and its many areas are described in this guide. A quick reference appendix containing a description of the Dashboard is also included at the end of this guide.

Throughout the GUI, an **About**, **User Guide** and a **Logout** button are always available in the header.

- Selecting **About** displays product information.
- Selecting **User Guide** opens up this user guide.
- Selecting **Logout** signs out the current user and returns the system to the product login page.

Navigating within the GUI

The Watchpoint System is a complex product with many areas of functionality. With this in mind, ERICSSON Television has designed the system to be easy to navigate and understand.

Area Navigation

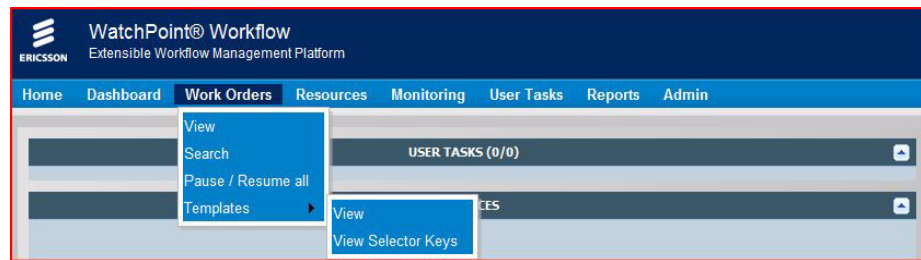
A menu is always available to allow the user to move from one area to another from any point within the system. The menu provides access to tools and management features.

Figure 2.3: Menu



When you select a menu, a submenu specific to that selection displays below the main menu.

Figure 2.4: Tool or Area Menu



Page Results Navigation

Pages with lists that continue on more than one page have navigation links at the bottom of the page. You can change the number of records displayed per page, navigate to the [first](#), [previous](#), [next](#), or [last](#) page, or skip to a specific page by entering the page number and clicking the [goto](#) link. When you change the number of records displayed per page, the display resets to the first record in the set. For example, if you are on page 5 of 17 with 10 records displayed per page, the display will return to page 1 of x when you change the display to 25, 50, or 100 records per page.







Figure 2.5: Page Navigation



Object Management

Some features are available throughout the Workflow System's GUI. Many areas contain a view page that lists the defined items of that type. When applicable, listed items include a check box to allow the selection of one or more items. Various commands are available that can be applied to these items, such as deletion from the system or toggling of the current status.

Figure 2.6: Object Management

Resources 			
<input checked="" type="checkbox"/>	Status	Admin Status	Resource Name 
<input checked="" type="checkbox"/>			AMS 3.3
<input checked="" type="checkbox"/>			AMS 4.0
<input checked="" type="checkbox"/>			AMS Message Service
<input checked="" type="checkbox"/>			Agility
<input checked="" type="checkbox"/>			Asset Management System
<input checked="" type="checkbox"/>			Buckminster
<input checked="" type="checkbox"/>			CableLabs VOD 1.1 Metadata Parser
<input checked="" type="checkbox"/>			Common Platform Dev Server II
<input checked="" type="checkbox"/>			Common Platform Dev Server III
<input checked="" type="checkbox"/>			Content Trafficking

Selecting the top box in the column header selects all the items on that page.

Object [links](#) within the list access the details/edit page for the entity selected.

Figure 2.7: Accessing an Object



Export/Save and Print Results

Throughout the Workflow System GUI, the **Save/Export** icon and the **Print** icon display when the displayed list can be exported as a CSV (comma-delimited) file or can be printed.

Figure 2.8: Save/Export and Print Icons



Sorting Results

Columns that have hyperlinked headings can be sorted. A triangle is displayed in the field currently controlling the results.

Figure 2.9: Linked Column Heading, Sorted in Ascending Order



Click the column heading to sort the by the column, toggling between ascending and descending order.

Figure 2.10: Linked Column Heading, Sorted in Descending Order



Mouse-over Tool Tips

WatchPoint provides contextual tool tips within the GUI as an aid to productivity. Activate tool tips by hovering your mouse over various icons and menu tab links.

Figure 2.11: Mouse-Over Tool Tips



Getting Started

Once you are comfortable with the GUI, you can begin working with the WatchPoint System. This guide provides extensive details of the many functions you can perform and monitor. When first setting up the workflow

or when expanding existing operations by adding processes, TTV recommends the following general order to your steps.

WatchPoint Workflow

1. Define and create user roles.
2. Define and create users.
3. Ingest resource groups and resource types created in WatchPoint Studio.
4. Ingest templates created in WatchPoint Studio.
5. Create work orders.
6. Perform work orders.

These processes are detailed in the following chapters.

3

ROLES

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Introducing Roles

Role-based security: Security based on user profiles and rights created by the system administrator.

WatchPoint has a **role-based security** design that allows system administrators to define areas of the system that the user can access and actions each user can perform. Roles limit user access to various functions, as appropriate to the user's role in the organization.

The security module checks the user profile and assigns the user rights with each login. Consequently, any roles created can be modified, and any changes that are saved are applied to the users assigned to that role upon the next login. Users can only be associated with one role identity at a time; however, users can be moved from one role to another. By allowing the creation of roles and user rights management, WatchPoint allows system administrators to customize system use and enforce a high level of security.

Admin role: System-defined role with full rights and access within the WatchPoint interface.

ERICSSON Television has defined an **Admin** role with installation. This role has full rights and access to all areas of the WatchPoint System. This role cannot be modified or deleted.



For security reasons, it is strongly advised that users be assigned to a user role and not to the Admin role.

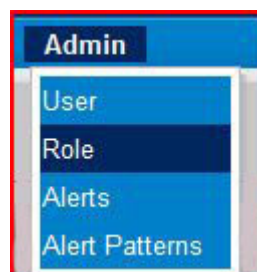
The System administrator can add, modify, or delete as many roles as needed. Roles define user rights and control points of access to WatchPoint's many functions. The menu options represent general areas of related activity and, accordingly, do not display areas that a user does not have permission to view. For example, personnel might only need to view reports, while head-end technicians may require access to all areas. The administrator can assign these tasks and design specific job parameters while still enforcing system security.

Viewing Defined Roles

To view defined roles:

1. From the **Admin** menu, select **Role** to display a list of all roles that have been created.

Figure 3.1: Role Submenu



The *Roles* page displays the number of users that have been assigned to each role in the *User Count* field. This field cannot be modified here. Role assignments are managed at the user level.

The number of permissions assigned to each role is displayed in the *Permission Count* field.

Figure 3.2: View Roles

WatchPoint® Workflow
Extensible Workflow Management Platform

Home Dashboard Work Orders Resources Monitoring User Tasks Reports Admin

Roles

	Name	User Count	Description	Permission Count
<input type="checkbox"/>	Admin	1	System Administrator	26
<input type="checkbox"/>	Buildmaster	1	Runs builds	2
<input type="checkbox"/>	Content Processing	1	Manages workflow	19
<input type="checkbox"/>	Device Manager	1	Lab admin	2
<input type="checkbox"/>	TenryTester	0	TemporaryTestRole	19

Create Delete

10 25 50 100 rows per page

page 1 of 1

go to page: 1

Create, delete and update roles here

2. Click the [Role](#) from the *Name* field to see more detailed information and to edit the information and permissions.

Creating a Role

Before creating a new role, certain decisions should be made, including tasks to be performed by the user and areas that this role satisfies. Within those areas, user access should be determined prior to role creation (i.e., does the user need to access all pages and their respective functions).

For a user to access any given page within the Workflow System Graphical User Interface (GUI), the user's role must have been granted access to that location. Additional rights that can be assigned are the ability to create, modify, delete, or approve system objects within the GUI, depending on the object being managed.

Assigned rights are equal and independent of each other. However, the *View* right must be enabled for any other rights to be assigned in an area. The system will not allow you to give a user permissions in an area unless the *View* right has been granted. For instance, if you select the *Create* right, the system will automatically also check the *View* permission in that area. If you deselect the *View* right, the system displays a warning.

Once you have determined the rights you want this role to include, you are ready to create it.

To create a role:

1. From the *Roles* page, click the [Create](#) button to create a new role. The screen displays the following:

Figure 3.3: Creating a New Role

Module	Permissions			
Home:	<input type="checkbox"/> Dashboard			
Monitoring:	<input type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Delete	<input type="checkbox"/> Modify
Plugins:	<input type="checkbox"/> View			
Reporting:	<input type="checkbox"/> View			
Resource Management:	<input type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Delete	<input type="checkbox"/> Modify
Role Management:	<input type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Modify	<input type="checkbox"/> Delete
User Management:	<input type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Modify	<input type="checkbox"/> Delete
User Tasks:	<input type="checkbox"/> Perform Task	<input type="checkbox"/> Override External Tasks	<input type="checkbox"/> Perform Others Tasks	
Work Order Management:	<input type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Delete	<input type="checkbox"/> Modify

2. Enter the *Role Name*. The Role Name is required and must be unique within the system.
3. Optionally, enter a *Description*.
4. Assign the rights to the profile. Select the appropriate boxes. To remove a selection, select the check box again.

The following rights are available for selection, depending on the area being defined.

- *View* – controls whether the menu item will be displayed to the user.
- *Modify*– the user can see and make changes to an object's details.
- *Create* – the user can add new entries to the system.
- *Delete* – the user can remove objects from the system.
- *Approve* – the user can place the item into the approved state.
- *User Tasks* – assigned within the template to a human resource type.
- *Perform Task* – if this user is the designated resource, the permission enables the user to complete the task.
- *Perform Other's Tasks* – enables the user to view and perform any tasks assigned to other users.
- *Override External Tasks* - allows anyone belonging to a role that has the permission to perform the task from within WatchPoint perform these tasks. This can be useful in certain rare cases where a task is performed in another application, but the task completion notification is not received by WatchPoint.
- *Dashboard* - Determines whether or not the workflow dashboard is presented to the user.

5. Click **Save** to complete. The new definition is added to the Roles page and available for assignment to a user.

Modifying a Role

The administrator can modify roles.

To modify a role:

1. Click an existing [role](#) name from the *Name* column on the Roles page.
The screen displays the following:

Figure 3.4: Modifying a Role

Role Details: TerryTester

* Name:

Description:

Permissions:

Module	Permissions			
Home:	<input checked="" type="checkbox"/> Dashboard			
Monitoring:	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Create	<input type="checkbox"/> Delete	<input type="checkbox"/> Modify
Plugins:	<input checked="" type="checkbox"/> View			
Reporting:	<input checked="" type="checkbox"/> View			
Resource Management:	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Create	<input checked="" type="checkbox"/> Delete	<input checked="" type="checkbox"/> Modify
Role Management:	<input checked="" type="checkbox"/> View	<input type="checkbox"/> Create	<input checked="" type="checkbox"/> Modify	<input type="checkbox"/> Delete
User Management:	<input checked="" type="checkbox"/> View	<input type="checkbox"/> Create	<input checked="" type="checkbox"/> Modify	<input type="checkbox"/> Delete
User Tasks:	<input checked="" type="checkbox"/> Perform Task	<input checked="" type="checkbox"/> Override External Tasks	<input checked="" type="checkbox"/> Perform Others Tasks	
Work Order Management:	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Create	<input type="checkbox"/> Delete	<input checked="" type="checkbox"/> Modify

The *Role Details* page is displayed. To change the profile, select or de-select the permissions.

- Click **Save** to save changes.
- Click **Cancel** to return to the View page without saving any changes.

Because permissions are assigned at the time of logon, currently logged on users with this role are not effected. Changes take effect in the user's next session.

CHAPTER

4

USERS

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About Users

While roles define permissions, personnel are assigned roles and must be provided a user name and a password to log on to the system.

Viewing Users

To view a list of all users that have been created:

1. From the **Admin** menu, select **User**.

Figure 4.1: Viewing Users



The Users page displays each user's *User Name*, *First Name*, and *Last Name*.

Creating a New User

To create a new user:

1. From the **Users** menu, select **Create**.

Figure 4.2: Create a User

2. Enter the user's information. Required fields are denoted by a red asterisk.
3. Select a role to define user permissions to view, create, modify, or delete in various management pages or to perform tasks.
4. To toggle between active and inactive user status, select the *Is Active* check box under the users last name.
5. Click **Save**. The new user is created.

Modifying a User

To modify a user:

1. From the Users page, click the [user name](#) to modify.

Figure 4.3: Modify a User



The form is titled "User Details: TinaFey". It contains the following fields:

- * User Name: TinaFey
- Password: (empty)
- Re-enter Password: (empty)
- * Roles: Site-Job test role (dropdown)
- * First Name: Tina
- * Last Name: Fey
- Is Active?: ☒
- * Email: tinafey@mailinator.com
- Employee ID: 123
- Department: thisisatest
- Location: test
- Phone: (empty)
- Extension: (empty)

At the bottom are "Save" and "Cancel" buttons.

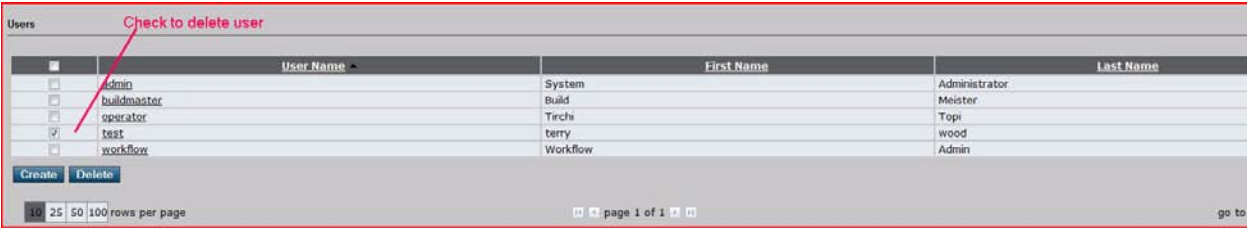
2. Edit user information, reset the password, reassign the role (permissions), or change user status (Active/Inactive).
3. Click **Save** to save change.
4. Click **Cancel** to return to the Users page without saving any changes.

Deleting a User

To delete a user:

1. Select the check box next to a user, then click **Delete**.

Figure 4.4: Deleting a User



The table is titled "Users". A red arrow points to the checkbox in the first column for the user "test".

	User Name	First Name	Last Name
<input type="checkbox"/>	admin	System	Administrator
<input type="checkbox"/>	buildmaster	Build	Meister
<input type="checkbox"/>	operator	Tirchi	Topi
<input checked="" type="checkbox"/>	test	terry	wood
<input type="checkbox"/>	workflow	Workflow	Admin

Buttons: Create, Delete

Page 1 of 1



If the user is a resource, the system displays an error message and the deletion fails. The associated resource must be deleted before the user can be removed.

If the user is not assigned as a resource, the delete processes successfully. The Users list displays with the user removed.

C H A P T E R

5

MONITORING

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Overview

WatchPoint provides several layers of system monitoring. The Dashboard displays current system health, current resource usage, current and past process activity, and drive status. In addition, WatchPoint includes a configurable alert notification system. With these features, Watchpoint provides visibility into system status within the graphical user interface (GUI) and a configurable alert notification system.

Monitoring Through the Dashboard

The Dashboard provides several views into current system use and status. Click the *Dashboard* tab to view these statuses.

System Health



The system health box indicates the status of the system and resources.

Figure 5.1: System Health





System

The *System* icon provides the status of the Alert Server and its connectivity to WatchPoint:

-  Green – The Alert Server is operational.
-  Red – The communication between the Alert Server (the server responsible for sending out alerts) and WatchPoint has been interrupted, or the Alert Server is down.

Resources

The Resources icon represents the various resources used by the system. Resources can be hardware, software, or human:

-  Green – All resources used by the Workflow System are operational.
-  Red – One or more resources are in an error state.



Offline resources are not considered to be in an error state.

To view resources:

1. From the **Resources** menu, select **View** or click the [Resources](#) link in the *System Health* section of the dashboard. A list of all defined resources is displayed. Any failed resources display on top.

Figure 5.2: View Resources

Status	Admin Status	Resource Name	Resource Type	Group	Connection String
		AMS 3.3	Host		10.232.7.6
		AMS 4.0	Host		10.232.7.23
		AMS Message Service	AMS	AMS (Monitoring)	http://10.232.7.23/amsUI/amsservices/AmMessageService
		Agility	Anystream Agility	Transcoder	http://10.232.7.18/AgilitySoap/AgilitySoapAPI.asmx
		Asset Management System	ADI 1.1 (ISA)	Asset Management System	10.232.7.23:5000
		Buckminster	Buckminster	Buckminster	file:///opt/buckminster/buckminster
		CableLabs VOD 1.1 Metadata Parser	CableLabs VOD 1.1 Metadata Parser	Metadata Parser	file:///dev/cablelabsvod11/parser
		Common Platform Dev Server II	Host	Hosts	10.232.7.49
		Common Platform Dev Server III	Host	Hosts	10.232.7.50
		Content Trafficking	Content Trafficking	Content Ingest, Content Trafficking	http://localhost:8080/portal/

This view is fully explained in Chapter 6, Resources.

Drive Status

The drive status box displays the amount of used and free space for the available drives.

Figure 5.3: Drive Status

Drive Status
Content: Used: 20.3G Free: 96%

Each drive is listed with *Used* and *Free* percentages:

- Green – Usage is between 0% and 50%
- Yellow – Usage is between 51% and 75%
- Red – Usage is between 76% and 100%

These numbers are the default configuration. Drive status threshold percentages are configurable. Refer to the *WatchPoint Workflow System Field Service Guide* for more information.

Resource Table

The resource table shows a list of resources currently being used for processing work orders. In this sample, the information for each entry includes the defined *Resource*, the *WO Number*, *Status*, *Admin Status*, and the percentage of *Progress*. The displayed fields are configurable.

Figure 5.4: Resource Table

Resource	Status	Admin Status	ID	Current Task	Progress
admin			400	Show Internal URL	0%
workflow			506	Show Internal URL	0%
workflow			401	Show Internal URL	0%
workflow			402	Show Internal URL	0%

If no resources are currently being used, the following text displays in place of a table: *No Resources in the configured set of Resource Groups are currently being used.*

Resource groups:
Collections of resources that perform the same task. Processes are distributed across the group.

Queue Tables

The queue tables correspond to **resource groups** defined in the system. Each table displays the work orders in the queue waiting to obtain resources from the resource group associated with the task. If there are no work orders in the queue, the queue table does not display.

Each display shows up to five work orders. Click the [ID](#) link to see additional details of the resource group queue.

Figure 5.5: Queue Tables

Quality Control Queue: 2

Priority	Status	Admin Status	ID	Current Task	Template
NORMAL			743	Show Internal URL	URL - v8
LOWEST			741	Notes	Title - v5



The fields (columns) displayed in the Resource Table and the Queue Table can be configured. This is explained in the *WatchPoint Workflow System Field Service Guide* that accompanies your system.

About the Alerts System

Alert pattern: A specific character string used to identify messages to trigger an alert.

Alert: The action to be taken when the pattern is matched.

WatchPoint monitors messages from resources to alert users to any errors. **Alert patterns** are configured to match possible message strings. When an alert pattern is matched, an **alert** is triggered. WatchPoint includes defined alert patterns and also provides alert and alert pattern management capabilities. Alert patterns and the alerts based on those patterns can be created, edited, and removed within the GUI.

To view alerts:

1. From the [Admin](#) menu, select [Alerts](#). A list of active alerts and their properties is displayed.

Figure 5.6: View Alerts

WatchPoint® Workflow
Extensible Workflow Management Platform

Logged in as: admin

Home Dashboard Work Orders Resources Monitoring User Tasks Reports Admin

Alerts

<input type="checkbox"/> Alert Identifier	Alert Pattern	Threshold	Frequency	E-mail	SNMP
<input type="checkbox"/> Database Operation Failed	Database Operation Failed Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Drive Status	Drive Status	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Duplicate Parameters	Duplicate Parameters For Workorder Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Invalid Template License	Invalid License for Templates Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Login Failed	Login Failed Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Pitch Schedule Notification	Pitch Schedule Notification Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Planner Notification	Planner Notification Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Protection Key Mismatch	Protection Key Mismatch Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Resource Failed	Resource Failed Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/> Resource Initialization Failure	Resource Initialization Failure Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓

Create Delete

Defined alerts are listed with their descriptive properties. Alerts are a combination of the triggering event and how the alert will behave when generated.

2. Click an [Alert Identifier](#) to view an alert's details.

Figure 5.7: Alert Details

Modify Alert

*Alert Identifier: Drive Status

*Alert Pattern: Drive Status

Threshold: Tell me if this alert happens

* 1 time(s) per * 1 : 0 : 0 (hhh:mm:ss)

Frequency: Do not trigger action more than

* 1 time(s) per 1 : 0 : 0 (hhh:mm:ss)

Alert Actions:

☐ E-Mail :

☒ SNMP Trap: 15

Save **Cancel**

* Denotes Required Field

This page illustrates the relationship of the alert pattern to the alert definition. The *Alert Pattern* is selected from a drop-down list; the remaining properties combine to form the alert definition. Alert patterns form the basis of alerts.

WatchPoint is configured with the following out-of-the-box alert patterns and alert definitions.

Table 5.1: Alert Patterns and Definitions

Alert	Alert Pattern Reg Expression	Description
Database Operation Failed	. *SQLException.*	Failure was detected while performing a database operation
Duplicate Parameters	. *with same parameters already received in the past.*	Work order creation was requested; start parameters identical to the past work order patterns
Protection Key Mismatch	. *mismatching protection keys.*	Work order was sent to the resource with different protection key
Resource Failed	. *Failure Event for Resource.*	Resource failure was detected
Resource Initialization Failure	. *Initialization Error.*	Resource Initialization failed while bringing it online
Saving Work Order Failed	. *Failed to save the process.*	Failure was detected while persisting the work order information to the database
Work Order Creation Failed	. *Failed to instantiate Work Order.*	Failure was detected while creating a new work order
Work Order Failed	. *execution failed.*	Work order has failed to complete
Login Failed	. *Login failed for.*	A failed login attempt is detected

SNMP: Simple Network Management Protocol.

On initial installation, these alerts are configured to send **SNMP** traps. They can also be configured to send e-mail alerts by modifying the definition.

Managing Alert Patterns

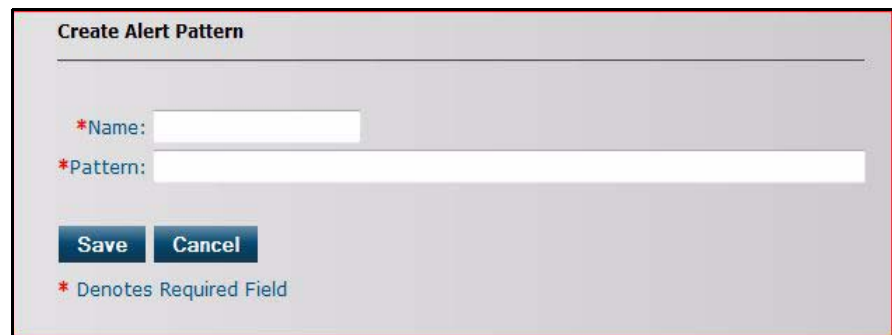
Before additional alerts can be created for other events, a new alert pattern must be defined to match the message string issued by a resource. Alert patterns are a specific set of characters that can be found in the system logs. When the pattern is detected, the alert is triggered. Patterns support the use of wild card characters to maximize matching flexibility.

Adding Alert Patterns

To add an alert pattern:

1. From the **Admin** menu, select **Alert Patterns**.
2. Click **Create**.
3. Enter a *Name* for the alert pattern.
4. Enter the string *Pattern* to match against.
5. Click **Save** to save the new pattern. The new pattern will be added to the Alert Patterns list.
6. Click **Cancel** to leave the page without saving your changes.

Figure 5.8: Creating an Alert Pattern



The screenshot shows a web form titled "Create Alert Pattern". It has two input fields: "*Name:" and "*Pattern:". Both fields are empty. Below the fields are two buttons: "Save" and "Cancel". At the bottom, there is a legend: "* Denotes Required Field".

View and Delete Alert Patterns

To view Alert Patterns:

1. From the **Admin** menu, select **Alert Patterns**.

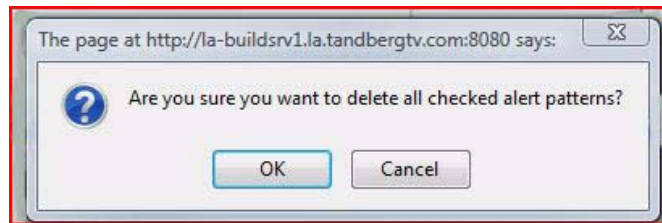
Figure 5.9: View Alert Patterns



Defined alert patterns are displayed with the pattern's *Name* and the specified *Pattern*.

2. To remove one or more patterns, select the checkbox and click **Delete**. The following confirmation displays:

Figure 5.10: Confirm Delete Alert Patterns



3. Click **OK**. The alert pattern will be removed from the listing.

Modifying Alert Patterns

Alert patterns can be modified.

To modify an Alert Pattern:

4. From the View Alert Patterns page, click the pattern [Name](#).
5. Enter the string modifications. The pattern's *Name* cannot be modified.

Figure 5.11: Modify an Alert Pattern



6. Click **Save** to save your changes
7. Click **Cancel** to leave the page without saving your changes.

Managing Alerts

Alerts can be added, modified, and removed from the system. The user can add new alerts to send a notification or display an error message when WatchPoint receives a matching alert pattern communication string.

Adding an Alert

To add an alert:

1. From the **Admin** menu, select **Alerts**.
2. Click **Create**. The screen displays the following:

Figure 5.12: Add Alert

Create Alert

*Alert Identifier:

*Alert Pattern: Choose One ▼

Threshold: Tell me if this alert happens

* time(s) per * : : (hh:mm:ss)

Frequency: Do not trigger action more than

* time(s) per : : (hh:mm:ss)

Alert Actions:

☐ E-Mail :

☐ SNMP Trap:

Save **Cancel**

* Denotes Required Field

3. Required fields are marked with an asterisk. Enter the following information:
 - *Alert Identifier* – Unique name to identify the alert.
 - *Alert Pattern* – The error string that is checked for in the log. Select from a drop-down list.
 - *Threshold* – The number of alerts that occur within a given period before notification is sent out.
 - *Frequency* – How often the alert notification is sent out.
 - *E-mail* – E-mail address that will receive the alert. The system must have access to an e-mail service.
 - *SNMP* – Whether the alert is configured to send SNMP traps. The data is an integer value and conforms to the system's configuration MIB file. Refer to the *WatchPoint Workflow System Field Service Guide* for more information.
4. Click **Save** to add the definition. Click **Cancel** to dismiss the page with no action.

Viewing Alerts

To view alerts from the [Admin](#) menu, select [Alerts](#).

Figure 5.13: Defined Alerts



<input type="checkbox"/>	Alert Identifier	Alert Pattern	Threshold	Frequency	E-mail	SNMP
<input type="checkbox"/>	Database Operation Failed	Database Operation Failed Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Drive Status	Drive Status	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Duplicate Parameters	Duplicate Parameters For Workorder Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Invalid Template License	Invalid License for Templates Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Login Failed	Login Failed Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Pitch Schedule Notification	Pitch Schedule Notification Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Planner Notification	Planner Notification Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Protection Key Mismatch	Protection Key Mismatch Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Resource Failed	Resource Failed Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓
<input type="checkbox"/>	Resource Initialization Failure	Resource Initialization Failure Pattern	1 per 1 Hrs 0 Mins 0 Secs	1 per 1 Hrs 0 Mins 0 Secs		✓

The following columns display:

- The *Alert Identifier* identifies the definition
- The *Alert Pattern* displays the string that triggers the instance.

The remaining fields define the action parameters.

- The *Threshold* indicates how often the string must be matched within a specific time period for the alert to be triggered.
- *Frequency* dictates how often the alert is triggered within a time period.
- The type of action (*E-mail*, *SNMP* trap notification, or both) is indicated by a checkmark in the column.

Editing an Alert

An alert can be edited at any time.

To edit an alert:

1. From the Alerts page, click the [Name](#) of the definition you want to change.

Figure 5.14: Modify an Alert

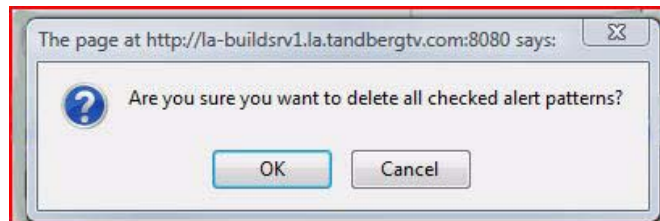
2. Enter edits. All fields can be changed except the *Alert Identifier* field.
3. Click **Save**. The changes take effect immediately.
4. Select **Cancel** to dismiss the page without saving.

Deleting an Alert

To delete an Alert:

5. Select the checkbox and click **Delete**. The following confirmation displays:

Figure 5.15: Confirm Delete Alert



6. Click **OK**. The alert will be removed from the listing.

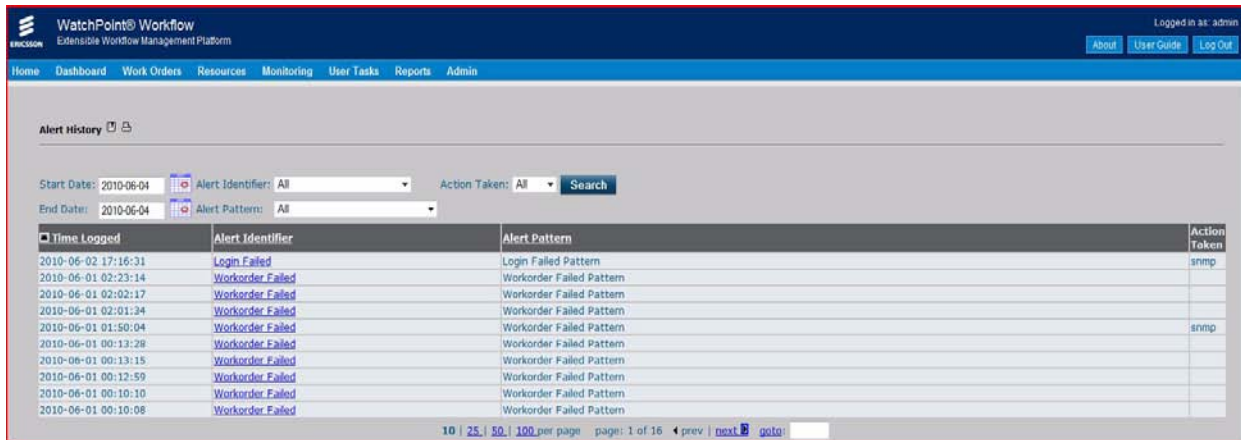
Viewing Alert History

The View Alert History page shows a history of alerts that have occurred.

To view Alert History:

1. From the **Monitoring** menu, select **Alert History**.

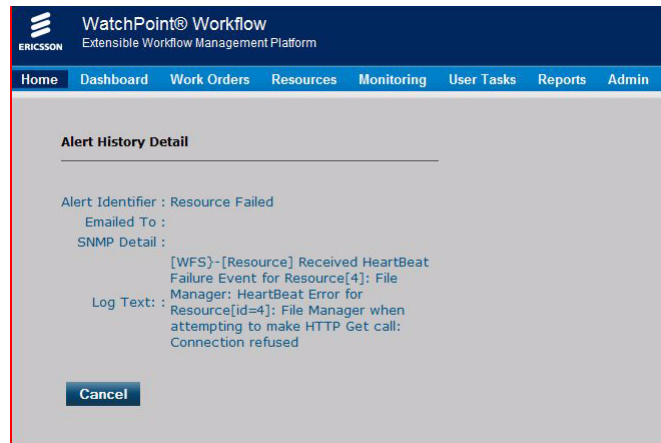
Figure 5.16: View Alert History



By default, results are limited to the current day and sorted by *Time Logged*. Each instance's *Alert Identifier*, *Alert Pattern*, and the type of *Action Taken* are listed.

- The alert history can have a large number of results, so additional search criteria is provided. You can also make selections to filter by date range, *Alert Identifier*, *Alert Pattern*, and *Action Taken* in any combination. Both the identifier and pattern fields are drop-down lists.
- Click an [Alert Identifier](#) to view additional details of that occurrence.

Figure 5.17: View Alert History Detail



The Alert History Detail page provides the specifics of the action taken (e.g., trap ID or e-mail address) and the *Log Text*.

- Click **Cancel** to return to the history list.

Repository Browser

Files and packages processed by WatchPoint are managed in the content repository, which is set up at the time of system configuration. Often users do not have access to these folders directly. This is done to preserve file security and ensure that additional errors are not introduced by manual edits to these files and folders.

WatchPoint provides the Repository Browser to offer a read-only tree view of the content repository. The Repository Browser also displays information

about the files including name, size, and date modified. The configuration is specified in the database. This includes the storage path, capacity, usage, and threshold percentages. WatchPoint can also be configured so that file names link to the file's creating work order.

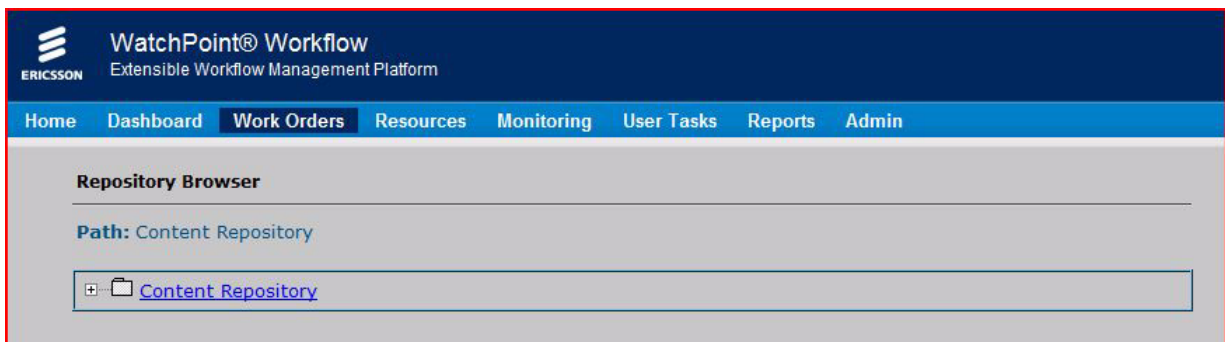


Adding storage drives is not supported in the browser GUI.

To view the Repository Browser:

1. From the **Monitoring** menu, select **Repository Browser**. The configured drives are listed as folders within the Content Repository. These correspond with the drive names displayed in the Drive Status table on the Dashboard.

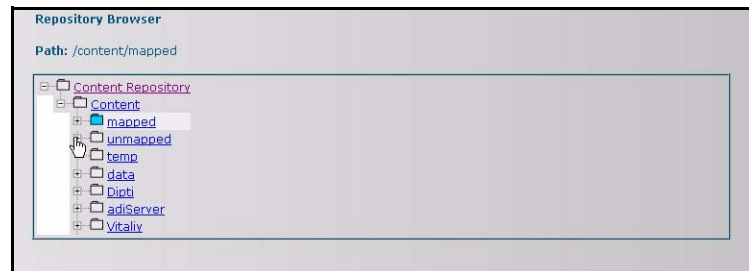
Figure 5.18: Content Repository Browser



Initially, the root folder of the Content Repository is displayed.

2. To navigate the directory, click the plus sign or the folder name in the tree to expand the folder and display its contents.

Figure 5.19: Folder Contents



3. Select a folder to display the folder's files and file information on the right. File information includes the file's name, size (in kilobytes), and last modified date and time.

Figure 5.20: File Information

Repository Browser

Path: /content/HBO.com/XPPK0001177539262937

	Name	Size(KB)	Date Modified
Content Repository			
Content			
mapped	ADI.XML	3	2009-08-10 10:52:34
	ADI.DTD	1	2009-08-10 10:52:34
unmapped	cap1.mpg	322763	2009-08-10 10:52:46
temp			
n2bb.com			
data			
directv.com			
DTV.com			
kk1.com			
HBO.com			
	XPPK0001177539262937		
	XPPK0001177539262938		
	XPPK0001177539262940		
vlada			
g			
export			
failed			
ingest			
1008			
1002			

CHAPTER

6

RESOURCES

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About Resources

The resource represents an external system used by the workflow process during order processing. This can be a hardware device performing a specific task such as encoding, or it can be personnel performing manual tasks within the template, such as quality checks, notifications, and validations. During work order processing, Workflow calls on the resource specified within the work order template to perform its assigned task.

Because a resource can be a hardware system or personnel, resources are identified within the system by its type. To achieve load balancing, resource instances that are the same type and that perform the same set of tasks are managed as part of a resource group. Tasks are then distributed across all the resources within the group. Resource types and groups are defined within WatchPoint Studio and ingested into the Workflow System.



Resources must be defined before work orders and tasks can be implemented.

Viewing Resources

To view resources, monitor the resources and their operational statuses:

1. From the **Resources** menu, click **View**. The list of all defined resources is displayed.

Figure 6.1: View Resources

Resources  						
<input type="checkbox"/>	Resource Name <input type="checkbox"/>	Connection String	Resource Type	Group	Status	Admin Status
<input type="checkbox"/>	ADI	amsnameserver:5000	ADI 1.1 (ISA)	Asset Management System		
<input type="checkbox"/>	AMS	http://10.232.7.6/amsservices/AmsMessageService	AMS	AMS		
<input type="checkbox"/>	Agility	http://10.232.7.18/AgilitySoap/AgilitySoapAPI.asmx	Anystream Agility	Transcoder		
<input type="checkbox"/>	CMS	http://10.232.7.4:8081/cms/services/CMSService	CMS	CMS		
<input type="checkbox"/>	Content	http://10.232.2.79:8080/portal	Content Trafficking	Content Planning, Content Trafficking		
<input type="checkbox"/>	Content Ingest	http://10.232.7.33:8080/portal/#content	Content Trafficking	Content Ingest		
<input type="checkbox"/>	Content manager	http://localhost:8080/portal	Content Management	Content Management		
<input type="checkbox"/>	Digital Rapids	http://10.10.0.115:43778/Stream?wsdl	DigitalRapids	DigitalsRapids		
<input type="checkbox"/>	Editor	http://138.85.186.52:8081/MediawareService/services/MediawareService	Mediaware	Mediaware		
<input type="checkbox"/>	Envivio	http://10.232.7.42/balancerSOAP	Envivio Adapter	Envivio Adapter		

[Create](#)
[Delete](#)
[Take Offline](#)
[Bring Online](#)

10 25 50 100 rows per page

page 1 of 3

go to page: 1





The following displays:

- *Resource Name* – identifies the specific entity and is also a link to view the resource's details.
- *Connection String* – specifies how WatchPoint accesses the resource. This can be a URL in the case of an external system or an e-mail address in the case of a human resource type.
- *Resource Type* – type of resource (e.g.: Human).
- *Group* – the group this resource belongs to; this value is also a link to the resource group's information.
- *Status* and *Admin Status* - These are described in the next section.

-
2. You can create and delete resources, bring them online, or take them offline. Online resources cannot be deleted. A resource must be taken offline to be modified or removed.

Defining Resource Status

The *Operational Status* is the current status of the resource in real time; the *Admin Status* represents a resource's requested Status. For example, when a user takes a resource offline, its *Admin Status* changes to offline. The resource continues to display the *Operational Status* as online until it has completed its current task. Then, it changes the *Operational Status* to offline. The status icon displays in one of four colors:

-  Green – The resource is online.
-  Yellow – The resource is offline.
-  Orange – The resource is initializing. This occurs when the Workflow System starts up and is checking whether the resource is ready to be used, or when a resource was taken offline and is in the process of coming back online.
-  Red – There is one of two errors. The type of error can be determined by information displayed within the row.

Recognizing Online and Offline Status

- When icons are both green (operational and admin status), the resource is Online.
- When icons are both yellow (operational and admin status), the resource is Offline.
- When icons are green (operational status) and yellow (admin status), the resource is still completing work orders that were in progress when the Offline state was requested.
- When the resource has completed the current task, Operational Status changes to yellow (e.g., the user wants to take the resource Offline to modify the status).

Recognizing Cause of the Error

The following sections explain the two potential causes of error: heartbeat and timeout.

Heartbeat Error

A heartbeat error is indicated when the row text is blue and the icons are red (in the operational status) and green (in the admin status). A heartbeat error occurs when a resource fails the period heartbeat check WatchPoint performs. This can be caused by a resource failure or a network interruption. WatchPoint recovers the resource from a heartbeat error automatically when the normal heartbeat response resumes.

Timeout Error

A timeout error is indicated when the *Connection String*, *Resource Type*, and operational status are red. The admin status is still green. This type of error occurs when a task is not completed within the time frame. For example, a human resource would be in a timeout error state when a user task is not completed within the time frame.

Correcting the Error Status

To fix a timeout error, select the resource's check box and take the instance offline. Verify that the operational status changes to yellow, and then bring the instance online.

Recognizing Initializing Status

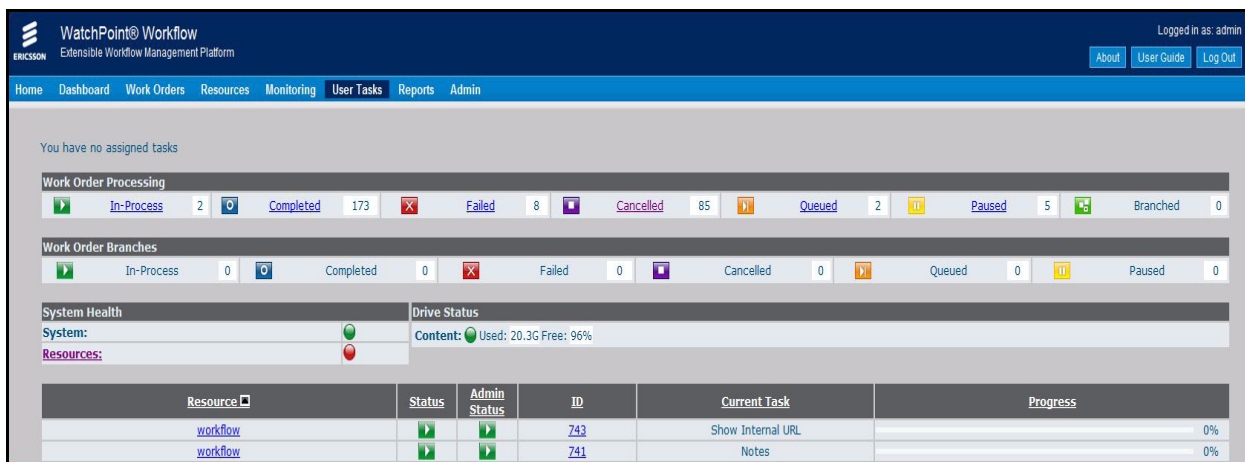
The following are situations when the Initializing status is used:

- When the user selects **Bring Online**, icons are orange (operational status) and green (admin status) while the resource is initializing.
- When initialization is complete, operational status changes to green.

Viewing Resources from the Dashboard

1. Click **Dashboard** to view the Resources on the Dashboard.

Figure 6.2: Resources Display in Dashboard



2. The resources will display under the System Health area. If there are no resources being used, a message will display.
3. From the Dashboard, click **Resources** to return to the Resources page shown in Figure 6.1.

Creating a Resource

To create a new resource:

1. From the **Resources** menu, select **Create**.

Figure 6.3: Creating a Resource

The screenshot shows the 'Create Resource' form in the WatchPoint Workflow interface. The form is titled 'Create Resource' and has a navigation bar at the top with links: Home, Dashboard, Work Orders, Resources, Monitoring, User Tasks, Reports, and Admin. The form contains the following fields:

- *Type :** A dropdown menu with 'ADI 1.1 (ISA)' selected.
- Functional Type :** A dropdown menu.
- *Group :** A dropdown menu with 'ADI_Group', 'Asset Management System', and 'OpenStream' options.
- *Name :** A text input field.
- *Connection String :** A text input field with a placeholder '[IP Address[:Port]]'.
- *Heartbeat Connection String :** A text input field with a placeholder '[IP Address[:Port]]'.
- *Heartbeat Frequency :** A text input field with a unit 'Seconds'.
- *Max Concurrent Usage :** A text input field with a placeholder '[Value 0(zero) means Infinity]'.
- Admin Status :** A dropdown menu with 'Online' selected.
- Operational Status :** A dropdown menu with 'Offline' selected.
- Ignore Timeouts :** A checkbox with the text '(do not set status to ERROR automatically if a Work Order using this resource times out)'.

At the bottom of the form, there are 'Save' and 'Cancel' buttons. A note at the bottom left states: '* Denotes Required Field'.

Required fields are marked with an asterisk.

2. Select the *Type* of resource being created. Some examples include ADI 1.1, AMS, Anystream Agility, CableLabs VOD 1.1, Content Management, File Subsystem, Human, XPORT IFrame, XPort Producer, or XPort Verifier. This list is populated by the data ingested from Studio.

Figure 6.4: Select Resource Type

The screenshot shows the 'Create Resource' form in the WatchPoint Workflow interface, with the 'Functional Type' dropdown menu open. The menu lists the following options:

- ADI 1.1 (ISA)
- AMS
- Anystream Agility
- Baton Verification
- Buckminster
- CableLabs VOD 1.1 Metadata Parser
- Content Management
- Content Trafficking
- DigitalRapids
- Envivio Adapter
- File Subsystem
- Human
- Mediapath Manager
- Mediaware
- Rhozet Transcoding
- RPM
- Rule Engine
- Watch Folder
- XPort IFrame
- XPort Packager

The form also includes fields for *Type, *Group, *Name, *Connection String, *Heartbeat Connection String, *Heartbeat Frequency, *Max Concurrent Usage, Admin Status, Operational Status, and Ignore Timeouts. The 'Save' and 'Cancel' buttons are at the bottom.

3. Select the *Functional Type*, which further restricts this resource to specific uses within its specified type. This list might or might not be populated.

4. Select the *Group* this resource will be part of. The options depend on the type of resource being configured. For example, if the resource is a Human type, the groups might be Content Manager, Adult QC, and QC.
5. Enter the *Name* that is the unique string used to identify the specific instance.
6. Enter the *Connection String* used to communicate with the resource, such as URL or IP:Port.
7. Define the *Heartbeat Connection String* for checking resource availability; to indicate the string is "*Same As Connection String*" check the box, or enter a different value.
8. Enter the *Heartbeat Frequency* in seconds to define how often to check the heartbeat.
9. Enter the *Max Concurrent Usage* to define how many work orders this resource can process at the same time. A value of 0 means infinite.
10. The status fields are populated by the system and cannot be modified. They are included for informational purposes only.
11. Check *Ignore Time-outs* if desired. This option is discussed below.
12. Click **Save** to add the resource. A confirmation message will display.
13. Click **Cancel** to dismiss the page without saving.

Viewing a Resource

Once a resource has been created, you can view its current settings.

To access the Modify Resource page:

1. Click a resource from the Resource Group page, or click a resource name from the View Resources page.



Resources that are online cannot be modified. If you need to modify a resource, take the instance offline on the View Resources page before clicking a Resource Name.

Figure 6.5: View Resource (Online)

Modify Resource

*Type : Content Trafficking

Functional Type:

*Group: Content Planning
Content Trafficking
PMM

*Name: Content

*Connection String: http://10.232.2.79:8080/portal [URL]

*Max Concurrent Usage: 0 [Value 0(zero) means Infinity]

Admin Status: Online

Operational Status: Online

Ignore Timeouts: ☐ (do not set status to ERROR automatically if a Work Order using this resource times out)

Take Offline **Cancel**

* Denotes Required Field

2. If the resource is online, the only available actions are to **Take Offline** or **Cancel** the page.
3. To close the page, click **Cancel**.

Modifying a Resource

Resources that are online cannot be modified. If you know you are going to modify the resource, you can take it offline on the View Resources page before clicking the Resource Name. Resources are not taken offline after the current task is completed. Until then, the operational status remains online, while the admin status shows offline and the resource cannot be modified.

To modify a resource:

1. Once the resource is offline, click the [Resource Name](#) on the View Resources page.

Figure 6.6: Modify Resource (Offline)

Modify Resource

*Type : Content Trafficking

Functional Type:

*Group: Content Ingest
Content Trafficking
PMM

*Name: Content Trafficking

*Connection String: http://localhost:8080/portal/ [URL]

*Max Concurrent Usage: 0 [Value 0(zero) means Infinity]

Admin Status: Offline

Operational Status: Offline

Ignore Timeouts: ☐ (do not set status to ERROR automatically if a Work Order using this resource times out)

[Bring Online](#) [Save](#) [Cancel](#)

* Denotes Required Field

Because the resource is offline, many of the fields can be modified and additional actions are available.

The resource's *Type* and *Functional Type* cannot be modified because these define other available attributes. The resource status is still not editable.

2. Enter any changes. To remove changes and restore the original values, before saving your entries, click **Cancel**.
3. Click *Ignore Time-outs* if desired. This option is discussed below.
4. After modifications are completed, click **Save**.
5. To bring the resource online, click **Bring Online**. Your modifications have been applied, and the resource is back online.

Ignore Time-outs Option

The Modify Resource page contains an option to ignore time-outs if a resource fails. The Work Order will check for pre-set amount of failures before a message is displayed. If this box is checked, and the resource takes a long time to process, an error message will display and the work order will continue to retry. The default amount of retries is currently set to three.

Figure 6.7: Modify Resource Ignore Time-outs

Modify Resource

*Type : Rule Engine

Functional Type:

*Group: Rule Engine
Rule Executor
Rule Progress Tracker

*Name: Yaga rule Manager

*Connection String: http://localhost:8080/portal/#Rule [URL]

*Max Concurrent Usage: 0 [Value 0(zero) means Infinity]

Admin Status: Online

Operational Status: Online

Ignore Timeouts: ☒ (do not set status to ERROR automatically if a Work Order using this resource times out)

Take Offline Cancel

* Denotes Required Field

Check this box so resource will not fail

Resource groups enable the workflow to balance the workload by distributing tasks among the group members. There are two ways to view resource groups:

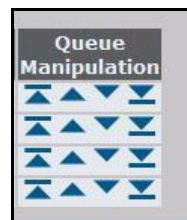
- Figure 6.8:** Queued Work Orders for a Group

This page lists the member resources, including the entity's name, connection string, and status. If any work orders are queued for this resource group, the list displays on the bottom half of this page. If no work orders are in queue, nothing displays in the bottom area.

Changing Work Order Priority in the Queue

A set of arrows displays in the *Queue Manipulation* column. These arrows are used to move work orders up and down within the queue. The work order can be moved to the top, one position higher, one position lower, or to the bottom of the queue.

Figure 6.9: Change Work Order Priority



Moving a work order above or below another order with the same priority does not change the assigned importance; it only changes the order of processing. However, if a work order with lower priority is moved above a work order with higher priority, that work order's priority is changed to the higher priority. A lower priority order cannot be moved ahead of one with a higher importance level, so the system changes this automatically.

Selecting the [ID](#) opens the View Work Order Tasks page. This view is described in the Work Orders chapter.

Viewing Plug-ins

The architecture of WatchPoint is extensible so that you can create your own resource type or group and add it to the system. Plugins provide communication between the resource and WatchPoint.



Instructions for deploying a new resource type or group are included in the *Software Development Kit Guide* that accompanies your system.

To view a Resource *Type* plug-in that has been deployed:

1. Select **Resources** -> **Types**.
2. The **Resource Type Plug-ins** screen will display as shown in Figure 6-10

To view a Resource *Group* plug-in:

3. Select **Resources** -> **Groups**.
4. The **Resource Group Plugins** screen will display. These lists display the status of the plugins and any error messages as shown in Figure 6-11.

Figure 6.10: View Resource Type Plugins








Resource Types			
Name	System ID	Error Messages	Status
ADI 1.1 (ISA)	AD		
AMS	06	• The Plugin for Resource Type: AMS[06] is missing or is invalid.	
Alloy	45	• The Plugin for Resource Type: Alloy[45] is missing or is invalid.	
Anystream Agility	08		
CMS	02		
CableLabs VOD 1.1 Metadata Parser	cl		
Content Management	CM		
Content Trafficking	PM		
DigitalRapids	dr	• The Plugin for Resource Type: DigitalRapids[dr] is missing or is invalid.	
Echo	27	• The Plugin for Resource Type: Echo[27] is missing or is invalid.	
Envivio Adapter	ea	• The Plugin for Resource Type: Envivio Adapter[ea] is missing or is invalid.	
FMS training	ZZ		
FMS training	zz	• The Plugin for Resource Type: FMS training[zz] is missing or is invalid.	
File Subsystem	07		
Host	jp	• The Plugin for Resource Type: Host[jp] is missing or is invalid.	
Human	04		
Lock	36	• The Plugin for Resource Type: Lock[36] is missing or is invalid.	
Math	28	• The Plugin for Resource Type: Math[28] is missing or is invalid.	
Mediapath Manager	11	• The Plugin for Resource Type: Mediapath Manager[11] is missing or is invalid.	
Mediaware	15	• The Plugin for Resource Type: Mediaware[15] is missing or is invalid.	
Mencoder	17	• The Plugin for Resource Type: Mencoder[17] is missing or is invalid.	
Mplayac	MC		
Mplayer	33		
N2BB Alerts Server	18	• The Plugin for Resource Type: N2BB Alerts Server[18] is missing or is invalid.	
Rhomet Transcoding	tt	• The Plugin for Resource Type: Rhomet Transcoding[tt] is missing or is invalid.	
Rule Engine	re		
Site Manager	SM		
TestVJType	VJ	• The Plugin for Resource Type: TestVJType[VJ] is missing or is invalid.	
Utilities	ut	• The Plugin for Resource Type: Utilities[ut] is missing or is invalid.	
VTPS	03		
Watch Folder	12		

Figure 6.11: View Resource Group Plugins

Resource Groups			
Name	System ID	Error Messages	Status
ADI_Group	AD		
AMS	06	<ul style="list-style-type: none"> Resource Type for System ID: 06 is inactive or not found in database Resource Type cannot be changed. 	
AMS (Monitoring)	06	<ul style="list-style-type: none"> Plugin is missing. 	
AMS External	06	<ul style="list-style-type: none"> Plugin is missing. 	
Adult AMS	06	<ul style="list-style-type: none"> Resource Type for System ID: 06 is inactive or not found in database Resource Type cannot be changed. 	
Adult QC	04		
Adult Transcoder	08		
Adult VTPS	03		
Adult Video - HD	05	<ul style="list-style-type: none"> Resource Type for System ID: 05 is inactive or not found in database Resource Type cannot be changed. 	
Adult Video - SD	05	<ul style="list-style-type: none"> Resource Type for System ID: 05 is inactive or not found in database Resource Type cannot be changed. 	
Adult Video - SD - QVGA	05	<ul style="list-style-type: none"> Resource Type for System ID: 05 is inactive or not found in database Resource Type cannot be changed. 	
Adult XPort Verifier	09		
Artwork	10	<ul style="list-style-type: none"> Resource Type for System ID: 10 is inactive or not found in database Resource Type cannot be changed. 	
Asset Management System	AD		
CIF WatchFolder	12	<ul style="list-style-type: none"> Plugin is missing. 	
CMS	02		
Clip XPort Verifier	09	<ul style="list-style-type: none"> Plugin is missing. 	
Content Ingest	PM		
Content Management	CM		
Content Manager	04		
Content Planning	PM	<ul style="list-style-type: none"> Plugin is missing. 	
Content Trafficking	PM		
Digital Rapids	dr	<ul style="list-style-type: none"> Plugin is missing. 	
Echo	27	<ul style="list-style-type: none"> Plugin is missing. 	
Envivio Adapter	ea	<ul style="list-style-type: none"> Plugin is missing. 	
Episode WatchFolder	12	<ul style="list-style-type: none"> Plugin is missing. 	
External AMS	06	<ul style="list-style-type: none"> Plugin is missing. 	

Resource Group
Plug-in errors

Plug-in Errors

If a plug-in does not deploy successfully, all the resources in that resource type or resource group are not available. Errors can indicate expired licenses, or invalid or missing plugins. Figure 6.12 shows Resource *Group* Plug-in errors, and Figure 6.13 shows Resource *Type* Plug-in errors.

Figure 6.12: Resource Type Plug-in Error

Buckminster	bu	<ul style="list-style-type: none"> The Plugin for Resource Type: Buckminster[bu] is missing or is invalid. 	
CMS	02	<ul style="list-style-type: none"> The Plugin for Resource Type: CMS[02] is missing or is invalid. 	
CableLabs VOD 1.1 Metadata Parser	cl	<ul style="list-style-type: none"> The Plugin for Resource Type: CableLabs VOD 1.1 Metadata Parser[cl] is missing or is invalid. 	

Developers who have created their own plug-ins use these pages to identify any errors ingesting the plug-in into WatchPoint. To resolve any errors, return to WatchPoint Studio to fix the plug-ins. When they are fixed, export the plug-ins, and restart WatchPoint.

C H A P T E R

7

WORK ORDERS

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Introducing Work Orders

A work order is a specific process or operation that is created and managed by the Workflow System. A work order is based on a selected template, which is the set of instructions and requirements needed for the process to begin, progress, and complete. The work order is the request for that set of instructions to be carried out. Until the work order is created, no processes occur.

There are numerous elements to a work order. First is the work order itself, which is the identifying instance of a process execution. The order is identified by a unique work order number and also has a priority. Then, there is the template the work order is based on, which defines the process. The process definition includes any tasks and resources needed, the order, and the structure for carrying out those tasks. Therefore, the **work order** area also provides visibility into the system templates that have been configured and ingested.

Viewing Templates

Templates are customizable XML files that contain the set of instructions needed to perform a process and are created and edited in WatchPoint Studio and then exported to the Workflow System. The Workflow System provides a Template Details page, which displays the complete set of tasks and operating instructions the template contains.

To view templates from the **Work Orders** menu, select **Templates**.

Figure 7.1: Template Details



Name	Timeout	Loops	Protection Key(s)
START Start	-NA-		COMMON
EXECUTION Initialize Process Variables	-NA-		
EXECUTION Make Original File Directory	-NA-		
CONTENT REPOSITORY Move to Original File Directory	00:30:00		
EXECUTION Set File Paths	-NA-		
DECISION Is Metadata File?	-NA-		
DECISION Run spec validation?	-NA-		
CONTENT INGEST Map Metadata to Title	00:05:00		
DECISION Metadata Mapped?	-NA-		
DECISION Trusted Provider?	-NA-		
EXECUTION Set CreateIfNotExist Flag	-NA-		
CONTENT INGEST Map Metadata to Title (Create if Not Exist)	00:05:00		
EXECUTION Extract Title Id and Mapped Assets	-NA-		
DECISION Mapped Assets?	-NA-		

A drop-down list of available templates displays at the top of the page. When first loaded, the first entry in the list is selected and its details are displayed. To change the template being viewed, select a different file from the list.

Each task's information includes the following:

-
- *Task Icon* – This icon is assigned during template creation that represents the type of node, task, or the task's associated resource group; if no icon was chosen when the template was designed, a default execution icon displays.
 - *Task Name* – The name of the task as defined in the work order template.
 - *Timeout* – Time expected to complete the task. The duration can be a constant, a function, or -NA-.
 - *Loop Names* (when applicable) – Tasks that are part of the same loop.

Parallel processes:
Tasks that occur on the same execution branch. These run concurrently.

Work order templates can contain **parallel processes**. Shaded rows represent branches of parallel processes. Tasks belonging to the same execution branch have the same background color.

The work order template can include conditional steps that are not executed. As a result, some steps might not be necessary each time.

In the right side of the window, the *Parameters* and *Protection Keys* are listed. *Parameters* are the template's input values. *Protection Keys* are used to partition the system and make certain a resource is not processing two types of work orders. A subset of resource groups and templates in the system can be associated with a protection key.

For instance, a protection key is used to partition the system between regular and adult content. The key is used to verify that regular contents are processed by regular resources and adult contents are processed by adult resources, thus preventing the co-mingling of the two content types. At runtime, the system ensures that work orders of a template and the resources that they use have protection keys that match (e.g., resources only allocated for non-adult content).

Assigning Selector Keys

When a template has been created in WatchPoint Studio, it is ingested into WatchPoint, making the template available to the user interface. The Selector Keys are attached to the template so that work orders can be automated.

Incoming messages have selector tags, which call for a selector class. This selector class returns the selector key. These selector keys are defined at the time of template implementation and customization.

Figure 7.2: Template Selector Key Details

Template Selector Keys

Asset Ingest - v48

Selector Keys

120111

New Selector Key

Add

All Selector Keys

Template	Selector Keys
Asset Ingest - v48	120111
Content Distribution - FTP - v6	
Content Distribution - Schedule Pitch - v4	
Content Distribution - Verify Pitch - v5	
Content Normalization - v1	re0101
Content Processing - v34	
Date Test5 - v1	
Package Ingest - v45	AD0101
Planner Ingest - v5	
Purge Template - v6	
Target Title - v0	SM0102

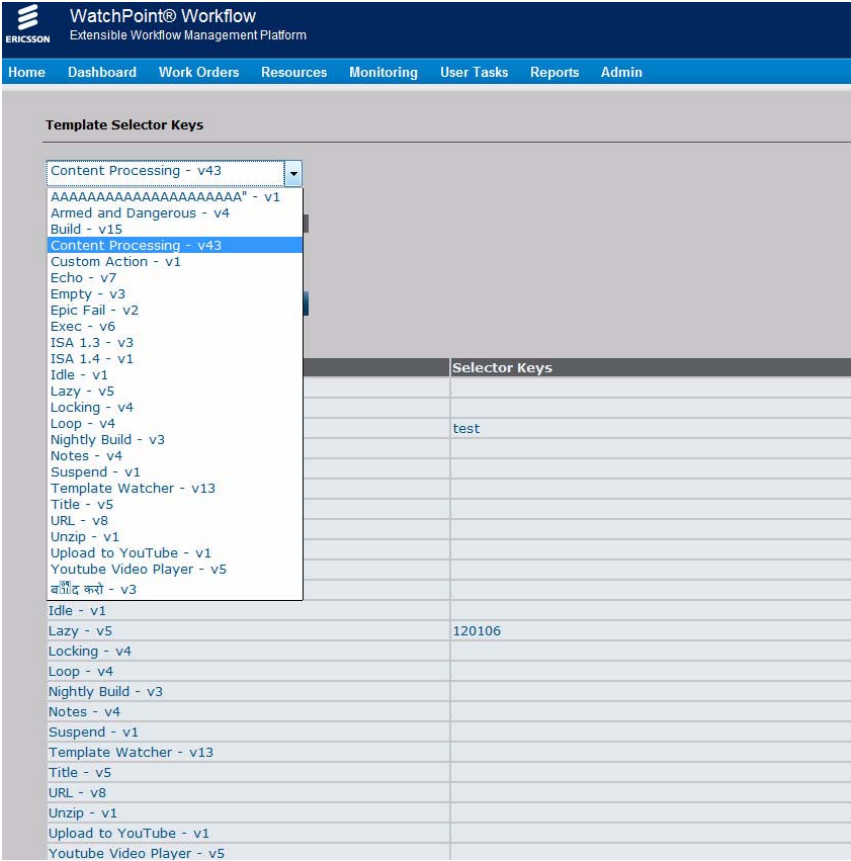
- The selector key is associated to a template.
- The incoming message calls the selector class from its tags
- The selector class returns the selector key, and the selector key is associated to the correct template.
- This template then automatically generates new work orders.

Assign a New Selector Key

To assign a new selector key:

1. Select **Work Orders -> Templates -> View Selector Keys**. Figure 7.2 displays.
2. Select the template from the drop-down list.

Figure 7.3: Select a Template



3. Type the new selector key (any string) in the *New Selector Key* field. A key can only be used once.
4. Click **Add**. The new key will be added to the *Selector Keys* field as shown in Figure 7.4.

Figure 7.4: Assign New Selector Key

Template Selector Keys

Baton Test - v18

Selector Keys

666

New Selector Key

Add

All Selector Keys

Template	Selector Keys
Asset Ingest - v48	120111
Baton Test - v18	666
Content Distribution - FTP - v6	
Content Distribution - Schedule Pitch - v4	
Content Distribution - Verify Pitch - v5	
Content Normalization - v1	
Content Processing - v34	
DigitalRapids - v4	
Package Ingest - v45	120112,AD0101
Planner Ingest - v5	120110
Purge Template - v6	
Target Title - v11	SM0103

5. If the key has already been assigned, the system returns an error:

Figure 7.5: Assign New Selector Key error message

Key test is mapped to template Build - v15

Template Selector Keys

Echo - v7

Selector Keys

No Keys Found

New Selector Key

Add

6. More than one key can be assigned to a template. A message may need more than one template to be executed. In this case, each key initiates a different template. However, each selector key can only be assigned to one template.

Delete a Selector Key

1. Select the template from the drop-down list.
2. Click the red X to delete a selector key.

Figure 7.6: Delete Selector Key



Creating a Work Order

To create a work order:

1. From the **Work Orders** menu, select **View**. The Work Orders listing displays as shown in Figure 7.14.
2. Click the **Create** button. The screen displays the following:

Figure 7.7: Creating a Work Order

A screenshot of the 'Create Work Order' form. It features a 'Work Order Template' dropdown menu and a 'Priority' dropdown menu set to 'NORMAL'. A 'Save' button is located below these fields. A note at the bottom states '* Denotes Required Field'.

3. From the *Work Order Template* drop-down list, select a template.



The system can retain multiple versions of a work order template. Work orders cannot be created by an older template version. If an older template is chosen, the system returns an error. If this happens, select a more recent version.

The selected template's parameters are displayed. Depending on the Work Order Template selected, different parameters display.

Figure 7.8: New Work Order Parameters Based on Templates

A screenshot of the WatchPoint Workflow 'Create Work Order' form. The header shows the 'WatchPoint Workflow' logo and the tagline 'Extensible Workflow Management Platform'. The navigation bar includes links for Home, Dashboard, Work Orders, Resources, Monitoring, User Tasks, Reports, and Admin. The form itself has a 'Work Order Template' dropdown menu with the selected value 'बग़ीद करो - v3' and a 'Priority' dropdown menu set to 'LOWEST'. A 'Save' button is at the bottom, along with the note '* Denotes Required Field'.

4. Change the *Priority*, if desired. The default is *NORMAL*.
5. Click **Save** at the bottom of the page. A confirmation page displays with the Work Order ID number and estimated duration of the work order.

Figure 7.9: New Work Order Confirmation

Work Order **#1511** has been created and is estimated to take approximately 0 hour(s) and 0 minute(s)

Searching Work Orders

A WatchPoint System can have thousands of work orders. To help users find results easily, the system provides several search methods.

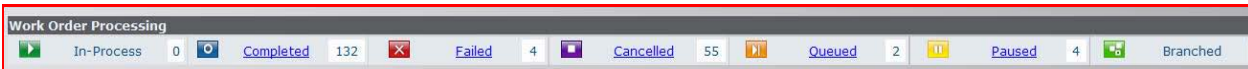
Searching by Status

The Dashboard provides both the number of work orders of a specific process status and a link to view those orders.

To search by status:

1. Click **Dashboard** to display the Dashboard.

Figure 7.10: Work Order Searching on the Dashboard



For instance, you can see that 55 work orders have been cancelled.

2. Click the **Cancelled** link to view the Work Order Details page with the list of cancelled orders.

Figure 7.11: Cancelled Work Orders

Work Orders

	Status	Admin Status	ID	Current Task	Template	Start Time	End Time	Protection Key
			733	Save	Template Watcher - v13	2010-05-19 01:10:18	2010-05-19 01:24:14	COMMON
			732	Echo	Echo - v7	2010-05-14 16:50:21	2010-05-14 17:19:02	COMMON
			726	Armed	Armed and Dangerous - v4	2010-04-30 22:38:19	2010-05-14 17:19:14	COMMON
			717	Echo	Echo - v7	2010-04-29 20:55:58	2010-05-19 01:24:23	COMMON
			693	Show Internal URL	URL - v8	2010-04-17 15:07:17	2010-04-17 15:08:13	COMMON
			682	Running	Idle - v1	2010-04-16 15:35:37	2010-04-16 15:36:49	
			681	Move to Imported Folder	Template Watcher - v13	2010-04-13 11:24:45	2010-04-16 15:01:30	COMMON
			680	Compile	Template Watcher - v13	2010-04-13 11:24:44	2010-04-16 15:01:30	COMMON
			642	Compile	Template Watcher - v13	2010-03-04 16:55:00	2010-03-04 19:15:16	COMMON
			641	Move to Imported Folder	Template Watcher - v13	2010-03-04 16:06:20	2010-03-04 19:15:45	COMMON

85 record(s) found.

Create Restart Delete

10 25 50 100 rows per page

page 1 of 9

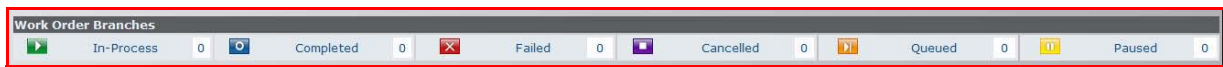
go to page: 1







Searching Branched Orders by Status

When the order execution arrives at a start of parallel execution steps, the work order is considered to be in a branched status and is further described in the Work Order Branches status bar. The Dashboard links take you to the Work Orders View list, filtered by the Branched status, and displays the Work Orders with tasks matching the status of the link (e.g., [Queued](#))

displays Branched Work Orders with tasks queued and waiting to be processed).

Figure 7.12: Work Order Branches



-  In-Process – Work Order Branches are currently being processed.
-  Completed – Work Order Branches have been completed.
-  Failed – At least one Work Order Branch has failed.
-  Cancelled – A Work Order Branch has been cancelled by a user.
-  Queued – Work Order Branches are in the queue and waiting to be processed.
-  Paused – A Work Order Branch has been paused by a user.

Advanced Searching

The Search page in the **Work Orders** area provides additional criteria.

To custom search:

1. Select **Work Orders** then **Search**. The Search page is the default start page for this area.

Figure 7.13: Search Work Orders Page

Search Work Orders

ID:

Template:
Content Distribution - FTP - v6
Content Distribution - Schedule Pitch - v4
Content Distribution - Verify Pitch - v5

Operational Status:
Completed
Failed
Cancelled

Start Date: Start
End

Priority:
Low
Normal
High

Protection Key:
Common
Non-adult

Search

The Work Order search criteria are configurable. WatchPoint provides a base set of search criteria, and a customer can identify additional criteria depending on the templates defined in the system.

Default searchable criteria include:

- *ID* – The unique number assigned to a work order at the time of creation
- *Work Order Template* – The work order template associated with the asset or work order
- *Operational Status* – The current operational status of a work order

- *Date Range* – The date range within which the work order was created. Enter the Start and End dates using the calendars.
- *Priority* – The value assigned to a work order; higher priority work orders are processed first
- *Protection Key* – The protection key value assigned to a work order

Additional search criteria are configurable based on variables defined in the template, such as:

- *Title* – The title of the package defined in the metadata of the package
- *Provider ID* – The ID of the provider who sends the package
- *Asset ID* – The ID of the individual asset in the package
- *Asset Type* – The type of asset (e.g., Trailer, Movie, Poster)
- *License Date* – The license start or end date defined in the metadata of the package

Criteria can be applied individually or in any combination. For example, you could search for all *Completed*, *High Priority* work orders with a *Common* protection key.

Viewing Work Orders

To view work orders, select **Work Orders -> View**. The Work Order Details page lists the search results.

Figure 7.14: Work Orders

	Status	Admin Status	ID	Current Task	Template	Start Time	End Time	Protection Key
<input type="checkbox"/>			746	Lazy	Lazy - v5	2010-06-04 15:36:03		COMMON
<input type="checkbox"/>			745	Compile	Template Watcher - v13	2010-06-04 15:35:50		COMMON
<input type="checkbox"/>			744	Compile	Template Watcher - v13	2010-06-04 15:35:48		COMMON
<input type="checkbox"/>			743	Show Internal URL	URL - v8	2010-06-04 15:35:21		COMMON
<input type="checkbox"/>			742	Running	Idle - v1	2010-06-04 15:35:21		
<input type="checkbox"/>			740	Stop	AAAAAAAAAAAAAAAAAAAAA* - v1	2010-05-25 00:33:02	2010-05-25 00:35:16	COMMON
<input type="checkbox"/>			739	Empty	Empty - v3	2010-05-24 21:12:44	2010-05-24 21:24:55	
<input type="checkbox"/>			733	Save	Template Watcher - v13	2010-05-19 01:10:18	2010-05-19 01:24:14	COMMON
<input type="checkbox"/>			718	End	Echo - v7	2010-04-30 15:58:48	2010-04-30 15:58:58	COMMON
<input type="checkbox"/>			717	Echo	Echo - v7	2010-04-29 20:55:58	2010-05-19 01:24:23	COMMON

255 record(s) found.

Create Resume Restart Pause Cancel Work Order Retry Delete

10 25 50 100 rows per page

page 1 of 26

go to page: 1

This page lists the work orders that matched the entered criteria. Within the page, users can **Create**, **Resume**, **Restart**, **Pause**, **Cancel Work Order**, **Retry**, or **Delete** one or more selected orders.

Depending on the processing status, different actions are available. For instance, the example above displays work orders of different statuses so all of the actions are displayed. The following example shows work orders that have failed.

Figure 7.15: Failed Work Orders

Work Orders 

	+	Status	Admin Status	ID 	Title ID	Title Brief	License Start	License End	Current Task	Template	Start Time	End Time	Protection Key
	-			274278	117745				Request To Distribute Title	Target Title - v9	2010-05-15 15:58:02		COMMON
	-			274277	117745				Request To Distribute Title	Target Title - v9	2010-05-15 15:57:06		COMMON
	-			274265	13	risto, by Alex	2006-05-08 00:00:00.0	1976-01-18 00:00:00.0	Move to Original File Directory	Asset Ingest - v46	2010-05-14 20:15:12		COMMON
	-			274264	14	hout	2021-07-25 00:00:00.0	1991-12-23 00:00:00.0	Move to Original File Directory	Asset Ingest - v46	2010-05-14 20:15:11		COMMON
	-			274163	117738				Run Local Content Processing	Target Title - v9	2010-05-14 18:53:32		COMMON
	-			274159	117742				Run Local Content Processing	Target Title - v9	2010-05-14 18:53:31		COMMON
	-			274155	117745				Request To Distribute Title	Target Title - v9	2010-05-14 18:48:06		COMMON
	-			274149	117745				Request To Distribute Title	Target Title - v9	2010-05-14 17:14:56		COMMON
	-			274148					Move to Original File Directory	Asset Ingest - v46	2010-05-13 21:09:53		COMMON
	-			262361					Map Metadata to Title	Asset Ingest - v46	2010-05-08 09:41:16		COMMON

21464 record(s) found.

CreateRestartCancel Work OrderRetryDelete

102550100rows per page

page 1 of 2147

go to page: 1

Branched: Status that occurs when a work order starts the execution of parallel processing.

In addition to *Status*, *ID* number, and *Current Task*, details include whether the process is **branched**. This is shown in the first column (labeled +) after the check box. If a plus sign is displayed in the row, the order is branched.

The work order's current admin and operational status are shown next. The *ID* column contains the work order number. The *Current Task* shows the specific operation the work order has achieved. In the case of completed processes, the task could show *End*. The *Template* identifies the work order template used as the instance's basis. Next are the *Start Time* and *End Times* for this execution. If the order has not finished, the *End Time* is empty. The last column shown contains the assigned *Protection Key*.

When an order displays a plus sign in the second column, click to expand and display individual branches.

Figure 7.16: Expand Branches in Work Order View

Work Orders 

	+	Status	Admin Status	ID 	Title ID	Title Brief	License Start	License End	Current Task
	+			487	20	KTLA News, 9am	2010-05-21T00:00:00	2010-05-28T00:00:00	Fork
	+			486	21	CBS Evening News	2010-05-24T00:00:00	2010-05-31T00:00:00	Fork
	+			485	44	KCAL 9 NewsCentral	2010-05-24T00:00:00	2010-05-31T00:00:00	Fork

Status	Admin Status	Current Task	Start Time	End Time
		Transcode Asset	2010-06-07 11:51:35	
		Join	2010-06-07 11:51:35	2010-06-07 11:51:35

3 record(s) found.

CreatePauseCancel Work OrderRetry

Toggle the plus sign again to collapse the display.

Viewing Work Order Audit Track

To view the Work Order Audit Track click any Work Order [ID](#) link to view or modify its properties.

When you click the Work Order ID, it defaults to the Work Order Tasks view. This page can also be accessed by clicking the **Tasks** submenu option. The first screen displays a work order that is *NOT* branched.

Figure 7.17: View Work Order Tasks (not branched)

Work Order Tasks

Tasks **Properties**

ID: 696
 Template: [Youtube Video Player - v5](#)
 Start Time: 2010-04-17 16:20:16
 End Time: 2010-04-17 16:20:19
 Operational Status: COMPLETED
 Admin Status: COMPLETED

Tasks

Task Name	Task Status	Start Time	End Time	Status
End	100%	2010-04-17 16:20:19	2010-04-17 16:20:19	COMPLETED

Task History

Task Name	Task Status	Start Time	End Time	Status
Start	100%	2010-04-17 16:20:16	2010-04-17 16:20:17	COMPLETED
Get Video Count	100%	2010-04-17 16:20:17	2010-04-17 16:20:17	COMPLETED
Get Video List	100%	2010-04-17 16:20:18	2010-04-17 16:20:18	COMPLETED
Get Video Details	100%	2010-04-17 16:20:18	2010-04-17 16:20:18	COMPLETED
Play Video	100%	2010-04-17 16:20:19	2010-04-17 16:20:19	COMPLETED

Restart Delete

10 25 50 100 rows per page

page 1 of 1

The next screen displays the Work Order tasks for a *Branched* Work order.

Figure 7.18: View Work Order Tasks (branched)

Work Order Tasks

Tasks **Properties**

ID: 487
 Template: [Content Processing - v34](#)
 Title: 20
 Start Time: 2010-06-07 11:54:45
 End Time:
 Operational Status: BRANCHED
 Admin Status: BRANCHED

Work Order Parameters:

Name	Value
assetConversionQCpassed	false
outputDirectory	/content/data/1002/2010_06_07/titles/20/processed
providerId	1002
tarDestination	/content/data/1002/2010_06_07/titles/20/package/487_BSPK1681274219915184.tar
titleBrief	KTLA News, 9am

Tasks

Task Name	Task Status	Start Time	End Time	Status
Fork	0%	2010-06-07 11:54:55	-NA-	BRANCHED
Reencode Asset	0%	2010-06-07 12:05:25	-NA-	IN PROCESS
Get Reencoded File MPEG Prop	0%	-NA-	-NA-	PENDING
Transcode Asset	0%	-NA-	-NA-	QUEUED
MPEG Formats?	0%	-NA-	-NA-	PENDING

Task History

Task Name	Task Status	Start Time	End Time	Status
Start	100%	2010-06-07 11:54:45	2010-06-07 11:54:45	COMPLETED
Get Title Status	100%	2010-06-07 11:54:45	2010-06-07 11:54:45	COMPLETED
Status == READY or Status == APPROVED ?	100%	2010-06-07 11:54:45	2010-06-07 11:54:45	COMPLETED
Initialize Variables	100%	2010-06-07 11:54:45	2010-06-07 11:54:45	COMPLETED
Generate TTV Metadata	100%	2010-06-07 11:54:46	2010-06-07 11:54:46	COMPLETED

The top of the page displays the work order's ID, template, Start and End times, and current statuses.

Beneath this is a select list of *Work Order Parameters*. When the template is created, the designer specifies which parameters are to be shown on the GUI. This determines what is shown on this page.

The complete list of parameter variables in the template are displayed when you click the **Properties** Tab. Available work order actions are provided next.

The *Tasks* section (in the middle of the page) displays both the work order's current and next step in the template for each branch.

For branched work orders:

The shaded rows indicate different branches. The branch colors correspond to the colors in the Audit Track (the bottom section labeled *Tasks History*).

The *Task Status* displays the percentage of completion for each task. If a step is pending, the progress displays 0%.

At the bottom of the page, the *Tasks History* section displays the steps already processed in the work order. The work order steps are listed in chronological order. Branched work orders use shaded rows to display parallel processes in a single list. (When rows are shaded the same color, they are part of the same branch.)

If the *Task Name* value is a link, messages and details related to the task and external systems are displayed. Click a link under the *Task Name* column.

Figure 7.19: Default Display for Task Details

WatchPoint® Workflow
Extensible Workflow Management Platform

Home Dashboard Work Orders Resources Monitoring User Tasks Reports Admin

Work Order Task Details

Task Name: Get Video Count
Start Time: 2010-04-17 16:20:17
End Time: 2010-04-17 16:20:17

UID	Name	Type	I/O	Message Time Stamp	Resource	Resource Group
018101	Video Count	ack	Incoming	2010-04-17 16:20:17	YouTube	YouTube Pool
018101	Video Count	control	Outgoing	2010-04-17 16:20:17	YouTube	YouTube Pool

Message:

10 25 50 100 rows per page page 1 of 1 go to page: 1

UID: Unique ID.
Assigned to message
types exchanged with
external systems.

Click a link in the **UID** column to display messages between the workflow system and any external systems. (In the following example, the UID [010503](#) type=**ack** is displayed.)

Figure 7.20: Message Example

WatchPoint® Workflow
Extensible Workflow Management Platform

Home Dashboard Work Orders Resources Monitoring User Tasks Reports Admin

Work Order Task Details

Task Name: Get Video Count
Start Time: 2010-04-17 16:20:17
End Time: 2010-04-17 16:20:17

UID	Name	Type	I/O	Message Time Stamp	Resource	Resource Group
018101	Video Count	ack	Incoming	2010-04-17 16:20:17	YouTube	YouTube Pool
018101	Video Count	control	Outgoing	2010-04-17 16:20:17	YouTube	YouTube Pool

Message:

```
<?xml version="1.0" encoding="UTF-8"?>
<WFSMessage RequestType="ack" Type="ack" UID="018101">
  <MessageBody>
    <ParameterList>
      <Parameter DataType="String" Name="WatchCount">
        <Value>494</Value>
      </Parameter>
    </ParameterList>
  </MessageBody>
  <ResponseDestination>
    <URL>http://138.85.186.73:80/workflow/services/AdapterService</URL>
  </ResponseDestination>
</WFSMessage>
```

10 25 50 100 rows per page page 1 of 1 go to page: 1

View Work Order Properties

To display the complete list of properties and parameters of the work order, on the Work Order Audit Track page, click the **Properties** Tab.

Figure 7.21: View Work Order Properties

Work Order Properties

Tasks Properties

ID: 1504
Template: [Target Title - v9](#)
Title: [367](#)
Start Time: 2010-05-06 22:25:48
End Time:
Operational Status: ERROR
Admin Status: ERROR
Priority: HIGH
Notes: test workorder priority [admin at Wed May 12 2010 11:33:07 GMT-0700 (Pacific Daylight Time)]
Additional Notes:

Work Order Parameters:

Name	Type	Variable	Value
Content Processing Scheduled?	BOOLEAN	processingScheduled	false
Has More Sites?	STRING	hasMoreSites	false
Master Title ID	STRING	titleId	367
Site Id	BOOLEAN	siteId	90
Site IDs	STRING	siteIds	90
Site Title ID	STRING	siteTitleID	
Source Component Name	STRING	sourceComponentName	WatchPoint
Source Entity Name	STRING	sourceEntityName	Workflow
Source Id	STRING	sourceId	1504 1666
unknown	STRING	processId	1504

Additional notes can be added at any time after the work order has been created, but existing notes cannot be modified or deleted. The same commands displayed on the Tasks page are also available below the parameters.

Working with Work Orders

Depending on the work order's current status, options display to pause, resume, cancel, retry, restart, or delete the work order.

Determining Work Order Status








The Work Order View indicates both a *Status* and an *Admin Status*. *Status* indicates the real-time, current operational status of the Work Order. *Admin Status* indicates the requested status of the Work Order. For example, if a work order is paused while processing a task, the Admin Status immediately changes to *Paused*, but the operational *Status* changes when the task has completed or the resource can pause its task safely.

The Work Order Status Icons are described in *Appendix A*.

Figure 7.22: Work Order with Different Admin Status

Requested work orders are scheduled to pause.

Work Orders 

	+	Status	Admin Status	ID	Title ID	Title Brief	License Start	License End	Current Task	Template	Start Time
<input type="checkbox"/>	+			487	20	KTLA News, 9am	2010-05-21T00:00:00	2010-05-28T00:00:00	Fork	Content Processing - v34	2010-06-07 11:54:45
<input checked="" type="checkbox"/>	+			486	21	CBS Evening News	2010-05-24T00:00:00	2010-05-31T00:00:00	Fork	Content Processing - v34	2010-06-07 11:51:27
		Status	Admin Status	Current Task		Start Time		End Time			
				Join		2010-06-07 11:51:41		2010-06-07 11:51:41			
				Transcode Asset		2010-06-07 11:51:41					
<input type="checkbox"/>	+			485	44	KCAL 9 NewsCentral	2010-05-24T00:00:00	2010-05-31T00:00:00	Fork	Content Processing - v34	2010-06-07 11:51:26

3 record(s) found.

Create Pause Cancel Work Order Retry

10 25 50 100 rows per page

page 1 of 1



In the above example, the work order as a whole is branched (as seen in *Status*) and has been requested to pause (*Admin Status*).



One branch is complete.



Two branches have been requested to pause.

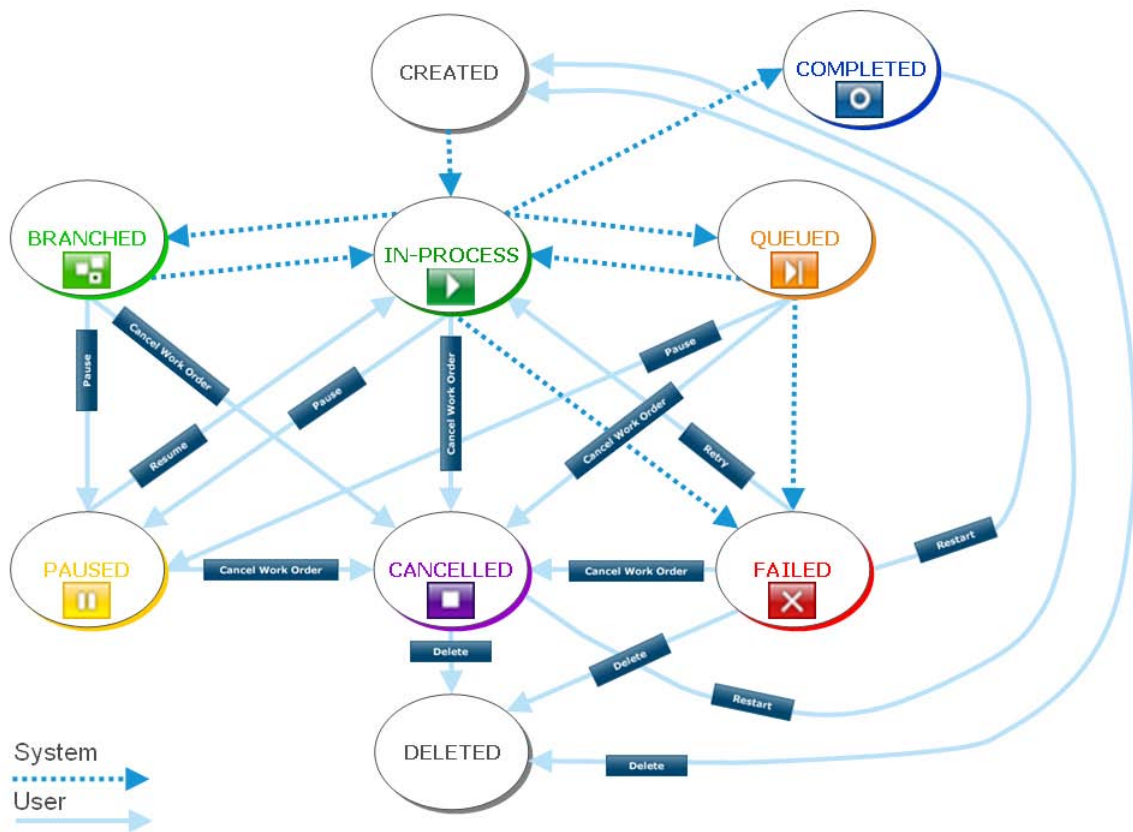
Status and Actions

The list that follows defines available actions with each stage of the process.

- *Pause* – Only in process, queued, and branched work orders can be paused.
- *Resume* – Paused work orders can be resumed.
- *Cancel* – In-process, failed, paused, queued, and branched work orders can be cancelled.
- *Retry* – Failed work orders can be retried and will start executing from the step where they last failed. Branched work orders can be retried if any of the branches are in a failed state.
- *Restart* – Restarts the work order from the beginning. A restart creates a new work order so the history of the original work order is maintained. Only failed and cancelled work orders can be restarted.
- *Delete* – Only completed, failed, or cancelled work orders can be deleted.

When a pause or cancel operation is attempted, the system waits to perform the action until the current task completes. Depending on the time required to complete the current task, the operation may take a while. The Admin Status changes instantly, based on the user action taken. The Operation Status changes after the current task is finished.

Figure 7.23: Work Order State Transition Diagram



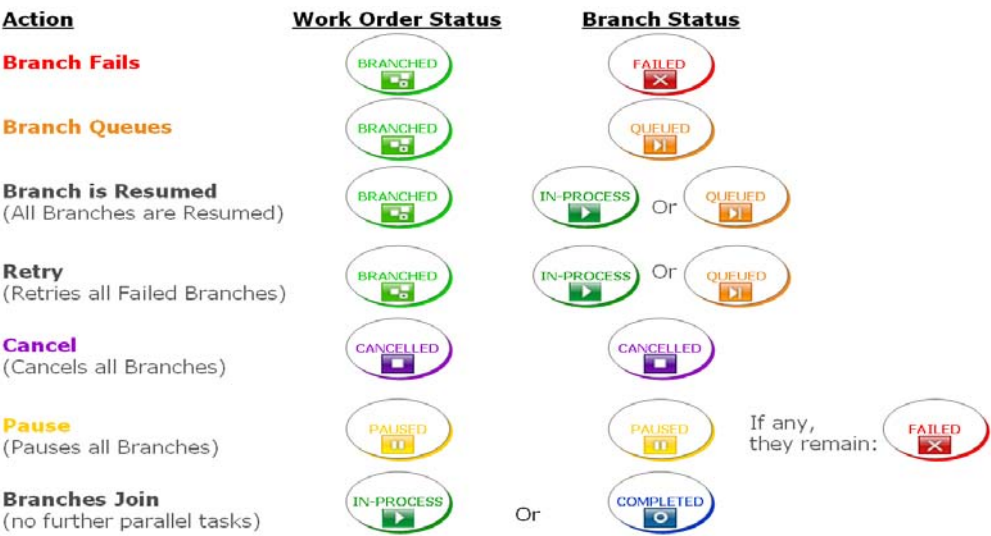
Branched Work Order Status Transitions

A work order remains in branched status when:

- *Work Order Branch Fails* – The Branch moves to Failed
- *Work Order Branch Queues* – The Branch moves to Queued
- *Resume on Branched Work Order* – Resumes all branches
- *Retry on a Branched Work Order* – Retries all Failed branches, which each move to an In-Process or Queued state, depending on resource availability
- *Cancel on a Branched Work Order* – Cancels all branches and the Work Order moves to Cancelled
- *Pause on a Branched Work Order* – Pauses all branches, and the Work Order moves to Paused
- *Failed Branches* – Remain Failed (not Paused)

On successful join of all the branches, a Branched Work Order moves to In-Process (out of Branched).

Figure 7.24: Actions for Branched Work Orders

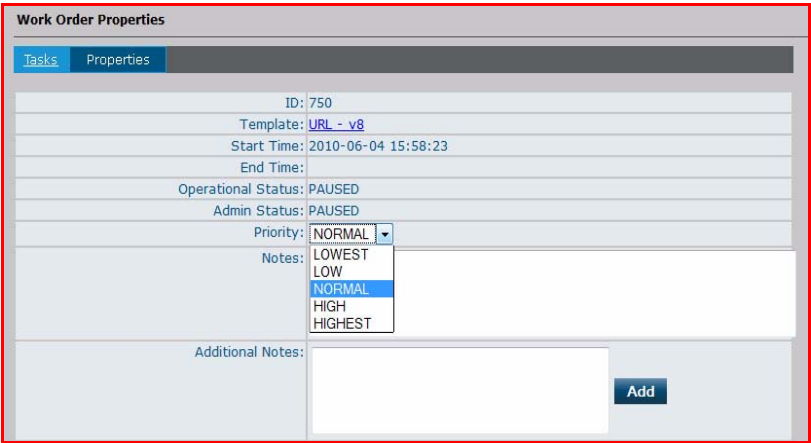


Change Work Order Priority

Priority determines what work order is processed first within the queue. With all other things being equal, a work order with a higher priority is moved in front of an order with a lower priority within the queue. Priority can only be changed while the work order state is In-Process, Paused, or Queued.

The priority can be changed on the View Work Order Properties page. The priority levels available include Lowest, Low, Normal, High, and Highest.

Figure 7.25: Change Work Order Priority



The priority level can also be changed within the queue. (This is described in the [Changing Work Order Priority in the Queue](#) section).

Add Notes to a Work Order

Notes can be added to a work order on the Properties page. Once the Notes are added, the entry cannot be deleted. Added notes are appended to the previous comments.

Figure 7.26: View Work Order Properties: Add Notes

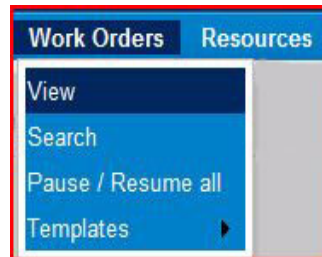
Name	Type	Variable	Value
adDtdFile	FILE	adDtdFile	/opt/tandbergtv/cms/workflow/ADL.DTD
aspratio	STRING	aspratio	1.7777777777777777
aspratioReencode	STRING	aspratioReencode	

Pause/Resume All

Currently processing work orders can be managed as a single unit.

1. From the **Work Orders** menu, select **Pause/Resume All**.

Figure 7.27: Pause/Resume option

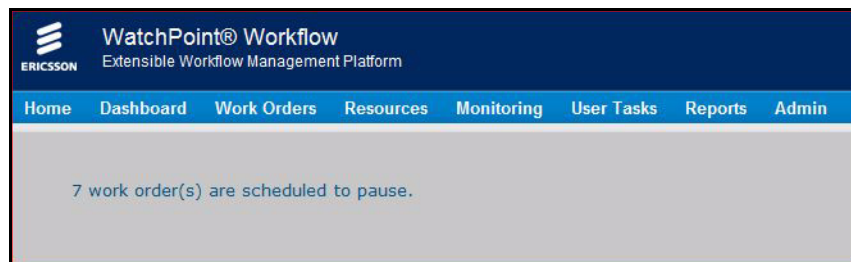


2. The login screen displays:

Figure 7.28: Pause/Resume login

3. Enter your *Login Name* and *Password*. This must match the login name and password used at the start of the session. Select the action you want to apply.

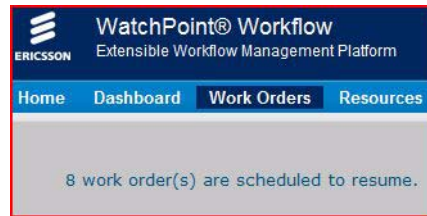
Figure 7.29: Pause All Confirmation



Pausing all work orders pauses all current work orders as well as any incoming work orders.

4. To reverse the action, select the Pause/Resume All option, enter your logon information, and click **Resume All**.

Figure 7.30: Resume All Confirmation



*Selecting **Resume All** resumes **ALL** work orders, including any that were paused prior to the last **Pause All**.*

CHAPTER

8

USER TASKS

What's Ahead ...

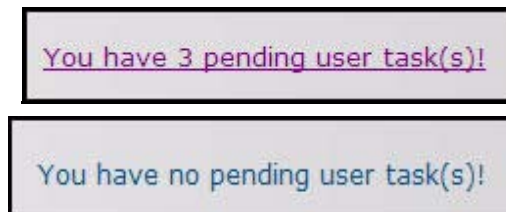
About User Tasks	77
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Performing Other User's Tasks	79
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About User Tasks

Tasks in a work order are assigned to resource groups and distributed to the individual resources in the assigned group. Each resource group is assigned to a resource type. When the resource type is *Human* and the work order moves to this task, the task displays as a user task that must be performed manually. When this happens, the users assigned to that task are notified of a pending task.

When the user first logs on to WatchPoint, the dashboard displays whether the user has any pending tasks to perform. If this link appears, clicking it displays a complete view list of the pending tasks. If a user has no tasks assigned, a message displays that there are no pending tasks found.

Figure 8.1: Dashboard Messages



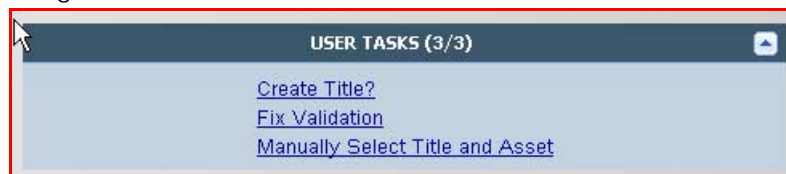
Manual Tasks

A manual task can be closed automatically from an external message without the user performing the task manually. You can also can override it by finishing the task manually. To do this, check the option "I want to perform this task immediately" from the task page. These steps are described in a subsequent section.

Viewing User Tasks

You can access User Tasks from the Home Page or the Dashboard. To access user tasks from the home page, click on the desired link as shown below:

Figure 8.2: User Tasks on Home Page



To view user task from the dashboard:

1. If there are tasks pending, click [pending user tasks](#) from the dashboard or the **User Tasks** menu.

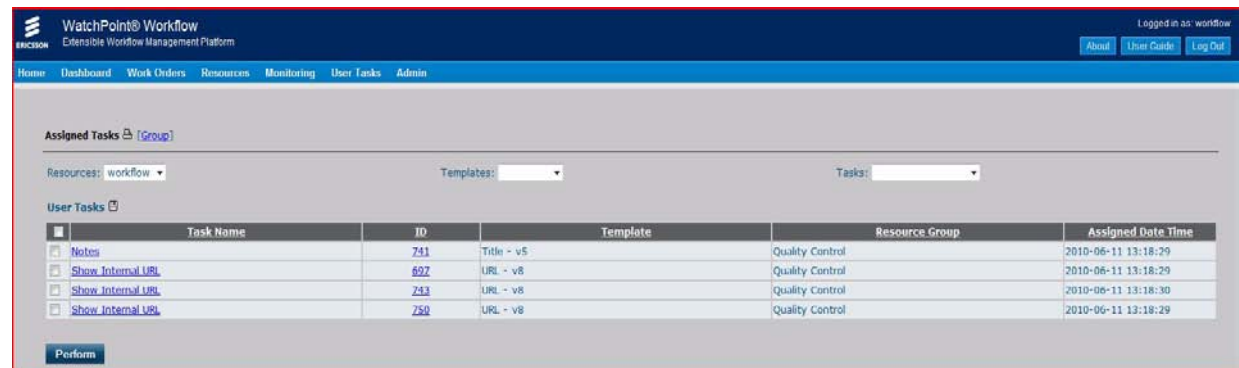
Figure 8.3: Grouped User Tasks



Tasks are grouped based on the template and task. The *Templates* and *Tasks* drop-down boxes are used to add filters.

2. Click [Ungroup](#) to view the tasks as a flat list.

Figure 8.4: Ungrouped User Tasks



Distributing User Tasks

WatchPoint administrators can grant users belonging to a role permission to perform tasks assigned to other users. This broadens the resources available for the task.

Modify User Role

To allow a user to perform another user's tasks, modify the user's role.

1. Select **Admin**, then **Role**. The Roles list displays.
2. Click a Role's name from the *Name* field.
3. Select the *Perform Other's Tasks* check box.
4. Click **Save** to save.

Figure 8.5: Modify Roles to Perform Other User Tasks

Role Details: TerryTester

* Name:

Description:

Permissions:

Module	Permissions			
Home:	<input checked="" type="checkbox"/> Dashboard			
Monitoring:	<input checked="" type="checkbox"/> View	<input type="checkbox"/> Create	<input type="checkbox"/> Delete	<input type="checkbox"/> Modify
Plugins:	<input checked="" type="checkbox"/> View			
Reporting:	<input checked="" type="checkbox"/> View			
Resource Management:	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Create	<input checked="" type="checkbox"/> Delete	<input checked="" type="checkbox"/> Modify
Role Management:	<input checked="" type="checkbox"/> View	<input type="checkbox"/> Create	<input checked="" type="checkbox"/> Modify	<input type="checkbox"/> Delete
User Management:	<input checked="" type="checkbox"/> View	<input type="checkbox"/> Create	<input checked="" type="checkbox"/> Modify	<input type="checkbox"/> Delete
User Tasks:	<input checked="" type="checkbox"/> Perform Task	<input checked="" type="checkbox"/> Override External Tasks	<input checked="" type="checkbox"/> Perform Others Tasks	
Work Order Management:	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Create	<input type="checkbox"/> Delete	<input checked="" type="checkbox"/> Modify

Check here to perform other's tasks

Performing Other User's Tasks

When a user has been assigned permission to perform other users' tasks, a drop-down list displays the names of other users. Select a user from the drop-down list to display that user's tasks.

Figure 8.6: Selecting User Resource

Assigned Tasks [Ungroup]

Resources:

admin

workflow

Title - v5 :

<input type="checkbox"/>	Task Name
<input type="checkbox"/>	Notes

The tasks pending for the selected user are displayed.

Figure 8.7: Other Tasks Display

Assigned Tasks [Ungroup]

Resources: Templates: Tasks:

Package Ingest - v45 : Create Title from Package?

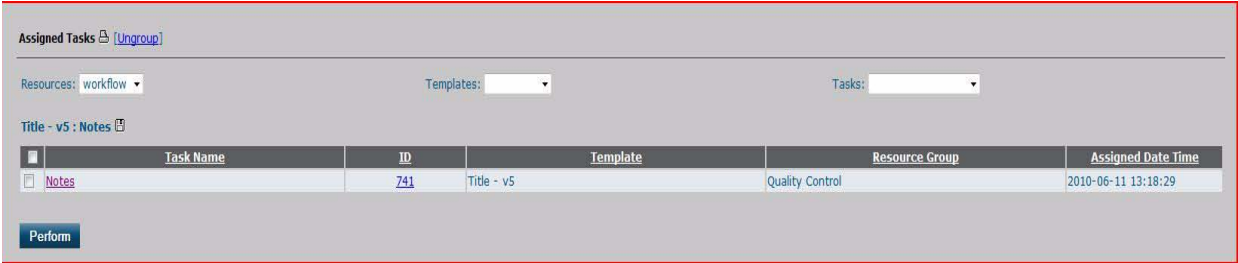
<input type="checkbox"/>	Task Name	ID	Title ID	Template	Resource Group	Assigned Date Time
<input checked="" type="checkbox"/>	Create Title from Package?	1282		Package Ingest - v45	Content Manager	2010-05-20 14:50:02
<input checked="" type="checkbox"/>	Create Title from Package?	1275		Package Ingest - v45	Content Manager	2010-05-20 14:48:54
<input type="checkbox"/>	Create Title from Package?	1281		Package Ingest - v45	Content Manager	2010-05-20 14:49:54
<input type="checkbox"/>	Create Title from Package?	1280		Package Ingest - v45	Content Manager	2010-05-20 14:49:43
<input type="checkbox"/>	Create Title from Package?	1279		Package Ingest - v45	Content Manager	2010-05-20 14:49:34
<input type="checkbox"/>	Create Title from Package?	1277		Package Ingest - v45	Content Manager	2010-05-20 14:49:14
<input checked="" type="checkbox"/>	Create Title from Package?	1278		Package Ingest - v45	Content Manager	2010-05-20 14:49:23
<input checked="" type="checkbox"/>	Create Title from Package?	1283		Package Ingest - v45	Content Manager	2010-05-20 14:50:46
<input type="checkbox"/>	Create Title from Package?	1276		Package Ingest - v45	Content Manager	2010-05-20 14:49:04

Performing User Tasks

Performing a task involves the same process if you are the assigned resource or if you are performing another user's assignment.

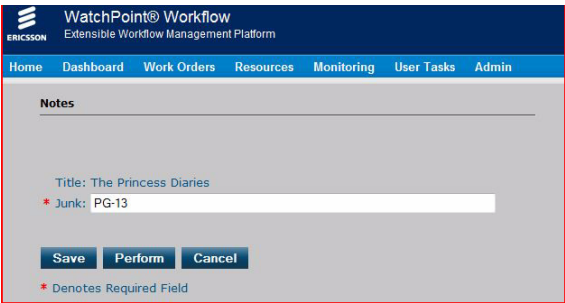
If you have assigned tasks, the dashboard displays [You have N assigned tasks](#) when you log on to the system. Click this link to view these tasks.

Figure 8.8: Assigned User Tasks



Tasks can be performed individually or in selected groups. If you click on the [Task Name](#) link, the task details screen displays as follows:

Figure 8.9: Assigned User Task details



Performing Individual Tasks

To perform individual tasks:

1. Click the [Task Name](#). The screen displays the following:

Figure 8.10: Perform a Task

WatchPoint® Workflow
Extensible Workflow Management Platform

Home Dashboard Work Orders Resources Monitoring User Tasks Admin

Show Internal URL

ⓘ This task is supposed to be completed by an external application or system

URL: http://localhost/portal/#Admin.Role?start=0&length=10&request_key=902 (opens in a new window)

Number: 0

Date:

Boolean: YES

☐ I want to perform this task immediately

Cancel

* Denotes Required Field

2. Click the checkbox to activate the Boolean drop-down menu and the **Save** and **Perform** buttons.
3. Select *Yes* or *No* from the *Boolean* drop-down.
4. Select the date to perform the task from the *Date* calendar.

Figure 8.11: Performing the Task

Boolean: YES

YES

NO

☒ I want to perform this task immediately

Save Perform Cancel

* Denotes Required Field

5. Click **Save** to submit the parameters without marking the task completed.
6. Click **Perform** to submit the parameters and mark the task as completed.



The work order does not proceed to the next node or step until the task has been marked as completed.

Batch Submit Results for Multiple Tasks

To process more than one task at the same time with the same results (batch submit):

1. Click the [Assigned Tasks](#) link from the Dashboard as shown in the following screen:

Figure 8.12: Select Several Tasks Simultaneously

WatchPoint® Workflow
Extensible Workflow Management Platform

Home Dashboard Work Orders Resources Monitoring User Tasks Admin

You have 4 assigned task(s) [Click to display assigned tasks](#)

Work Order Processing

In-Process	4	Completed	178	Failed	8	Cancelled	89	Queued	1	Paused
------------	---	-----------	-----	--------	---	-----------	----	--------	---	--------

Work Order Branches

In-Process	0	Completed	0	Failed	0	Cancelled	0	Queued	10
------------	---	-----------	---	--------	---	-----------	---	--------	----

System Health

System: ●

Resources: ●

Drive Status

Content: ● Used: 11.31G Free: 98%

Resource	Status	Admin Status	ID	Current Task
workflow	▶	▶	697	Show Internal URL
workflow	▶	▶	743	Show Internal URL
workflow	▶	▶	750	Show Internal URL
workflow	▶	▶	741	Notes

1. The *Assigned Tasks* screen showed in Figure 8.4 displays.
2. Select the check box for each task.



Batch submissions can only be used if the decision/action is the same for all of the selected tasks.

Figure 8.13: Select Several Tasks Simultaneously

Assigned Tasks [Ungroup](#)

Resources: workflow Templates: Tasks:

Title - v5 : Notes

	Task Name	ID	Template	Resource Group	Assigned Date Time
<input type="checkbox"/>	Notes	741	Title - v5	Quality Control	2010-06-11 13:18:29

URL - v8 : Show Internal URL

	Task Name	ID	Template	Resource Group	Assigned Date Time
<input checked="" type="checkbox"/>	Show Internal URL	743	URL - v8	Quality Control	2010-06-11 13:18:30
<input checked="" type="checkbox"/>	Show Internal URL	750	URL - v8	Quality Control	2010-06-11 13:18:29

Perform

2. Click **Perform**. The screen displays the following:

Figure 8.14: Performing Several Tasks



Note that the URL now says *Multiple Values*, and that there are two new *Apply to All Tasks* checkboxes.

3. Click the checkbox to activate the Boolean drop-down menu and the **Save** and **Perform** buttons. The screen shown in Figure 8.11 displays.
4. Select *Yes* or *No* from the *Boolean* drop-down.
5. Select the date to perform the task from the *Date* calendar.
6. Click the *Apply to All tasks* checkboxes.
7. Click **Perform** to complete the tasks. The tasks will be removed from the Assigned Tasks list.

Performing External Tasks

This page is displayed when the manual task is completed by using another page or external application integrated with the WatchPoint system.

Figure 8.15: External Task Page

To perform tasks assigned to an external source:

1. If your role has the correct permission, you can override the external resource. Select *I want to perform this task immediately*. The **Save** and **Perform** options are displayed as shown below:

Figure 8.16: Save and Perform External Task

Fix Validation

⚠ This task is supposed to be completed by an external application or system

Title URL: [/portal/#Content.Search?action=CORRECT&titleId=1115&request_key=1874](#)
Provider Id: 1002

Title Validation Failed: The title failed validation with the following messages:
Error:Box Cover,Asset Name is empty Info:Box Cover,Asset Class is empty Info:Box Cover,Asset ID is empty Info:Box Cover,Creation Date is empty Info:Box Cover,Description is empty Info:Box Cover,Product is empty Info:Box Cover,Provider ID is empty Info:Box Cover,Version Major is empty Info:Box Cover,Version Minor is empty Info:Box Cover,Content is empty Info:Box Cover,Content Size is empty
Validation Message: Info:Box Cover,Content Check Sum is empty Info:Box Cover,Application Type is empty Info:Box Cover,Provider Name is empty Info:Box Cover,Asset Class not equals to box cover Info:Box Cover,Content Check Sum is not in hex format Info:Box Cover,Application Type is not equals to 'MOD', 'VOD' or 'SVOD' Info:Encrypted,Asset Name is empty Info:Encrypted,Asset Class is empty Info:Encrypted,Asset ID is empty Info:Encrypted,Creation Date is empty Info:Encrypted,Description is empty Info:Encrypted,Product is empty Info:Encrypted,Provider Name is e...

☒ I want to perform this task immediately

Save Perform Cancel

* Denotes Required Field

2. Enter any necessary data and click **Perform**. The system returns to the tasks list.



Your role must have the Override External Tasks option enabled.

CHAPTER

9

REPORTING

What's Ahead ...

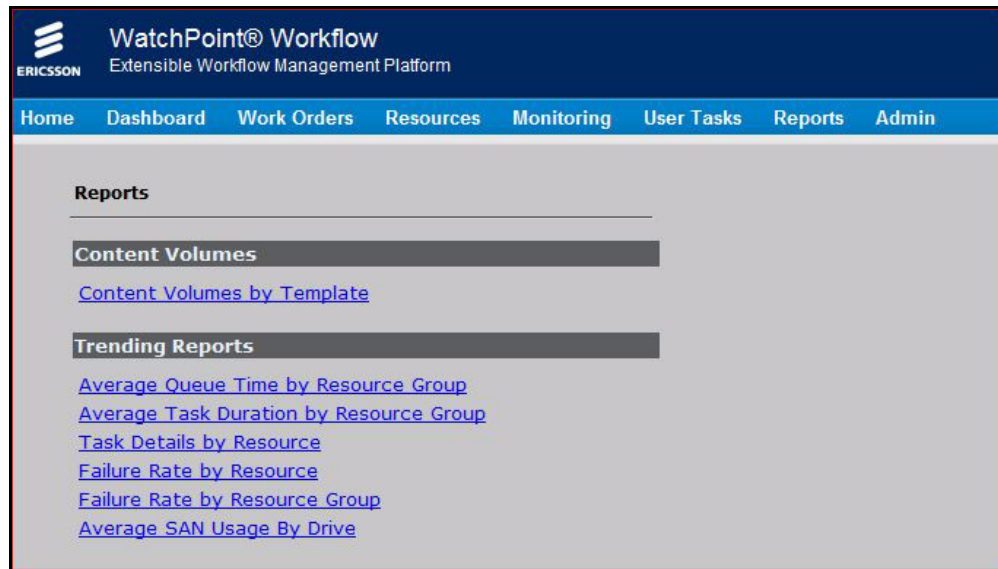
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Listing Reports

WatchPoint supports both standard and custom reports. Both types display in the Reports list.

To list reports, select the [Reports](#) menu.

Figure 9.1: Standard Reports



The list of reports displays.

The following standard reports are included in the Workflow System installation.

Table 9.1: Standard Reports - Content Volumes

Report Name	Description
Content Volumes By Template	Number of work orders for a particular template within specified date range

Table 9.2: Standard Reports - Trending Reports

Report Name	Description
Avg QueueTime by Resource Group	Length of time a work order stayed waiting on a queue before being processed (within a specified date range); Average time spent in queues for specified Resource Group(s)
Avg Task Duration by Resource Group	Time each task takes on average
Task Details by Resource	Tasks (by work order) that have been processed by a particular resource within a specified date range, how long it took, when it was used, and the final status
Failure Rate by Resource	Rate at which work orders failed using a particular resource within a specified date range
Failure Rate by Resource Group	Rate at which work orders failed using a resource within a specified group
Average SAN Usage by Drive	How much storage is being used within a specified date range

The following table contains additional examples of custom reports of templates that support **provider id**, **license window**, and **package asset id** parameters.

Table 9.3: Example Custom Reports

Report Name	Description
Content List by Provider	Assets that have been processed for a particular Provider and Asset Type within a specified date range
Work Orders Missing the License Window	List of titles (assets) that were not available before license start date
Count of Work Orders by Template, Provider	Number of work orders for a particular template and provider, within the specified date range
Work Orders per Package Asset ID	Number of work orders pertaining to a particular package

Running Reports

When you run a report, you might be required to enter parameters.

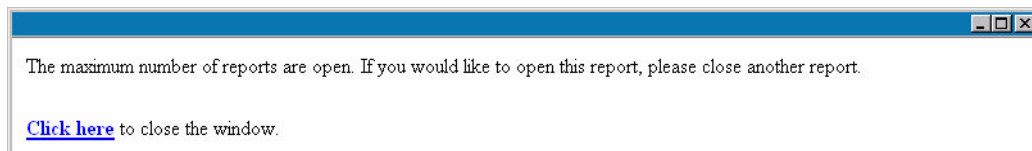
To run a report:

1. Click a Report name.



Access to the reports is limited by the number of user licenses. Therefore, you must close the report window when you are done viewing the report, either by clicking the "x" in the report tool bar or the Close link.

Figure 9.2: Error When Maximum Reports are Open



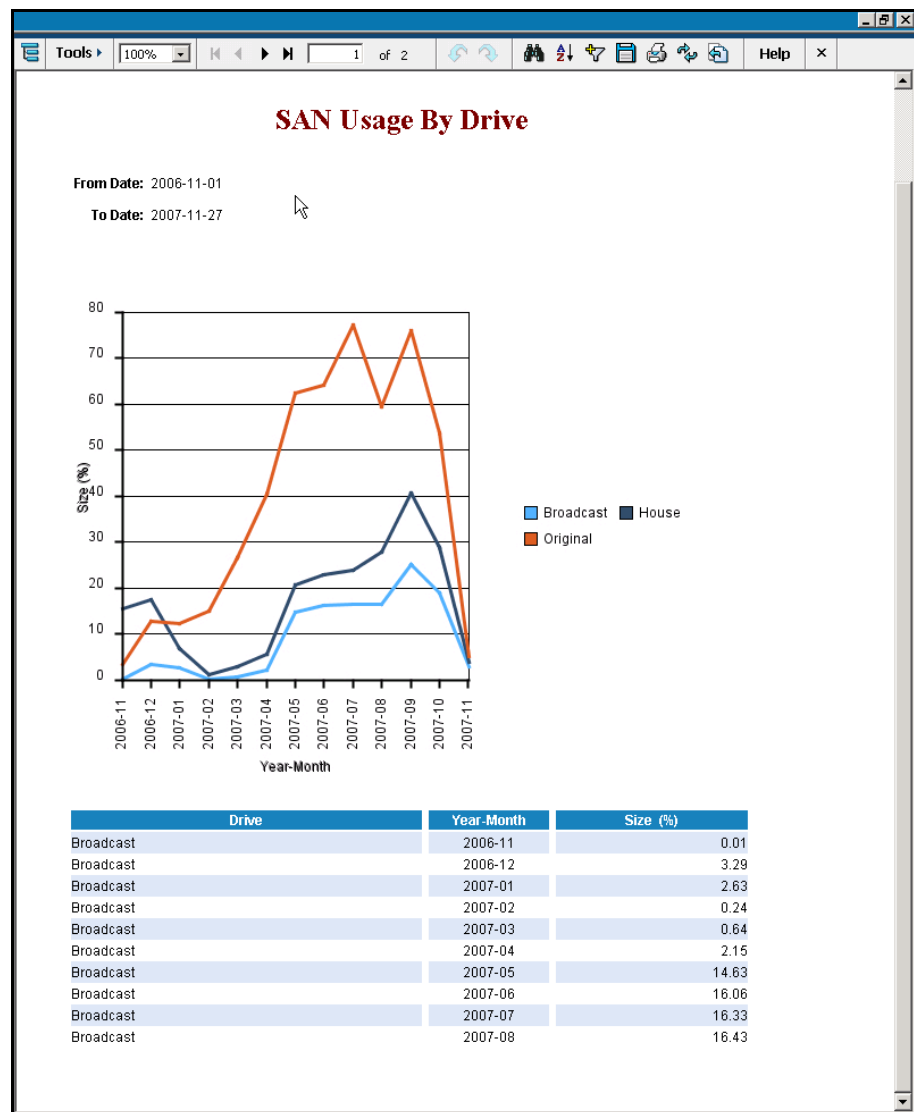
When parameters are required, a warning displays.

Figure 9.3: Parameters are Required



2. Complete the values and click **Generate** to generate the report.

Figure 9.4: Report View



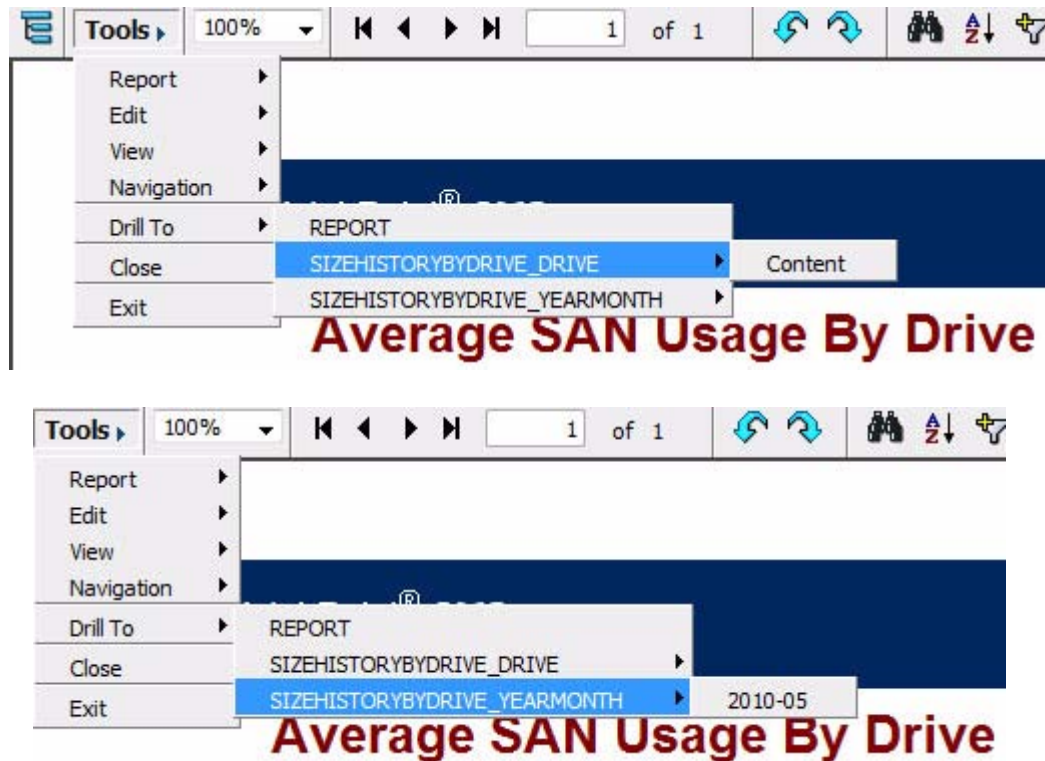
Controlling the Report View

The major features of controlling the report result view include:

- **TOC Browser** – To navigate the report, use the Table of Contents (TOC) panel
- **Tools** (drop-down menu) – Drop-down access to View Features
 - **Report** – New, Save, Save As..., Save Result..., Export To [PDF, Excel, RTF, HTML, Text, PostScript, XML], Style, Page Setup..., Printable Version
 - **Edit** – Undo, Redo, Search..., Find Next, Find Previous, Reset, Refresh
 - **View** – User Information Panel, TOC, Sort [Sort on Groups, Sort on Detail], Filter, Customize..., Pop-up Menu, Skin (for the icon tool bar in JReport)
 - **Navigation** – First Page, Prev Page, Next Page, Last Page
 - **Drill To** – Report (top level); Drill down or up one group level to show records of a particular group
 - Close

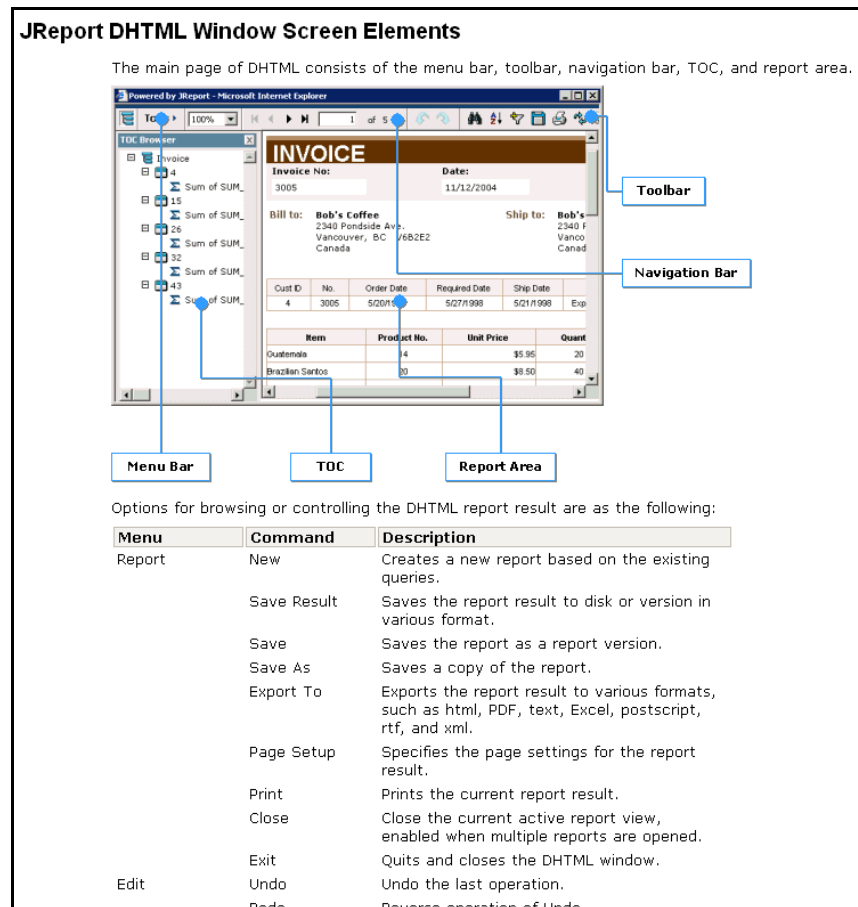
- Exit

Figure 9.5: Examples of Using “Tools” and “Drill To”



- **Zoom** – Enlarge or reduce the size of the report result (Percentages available: 30, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, and 400%)
- **Navigation** – Navigate through the report with arrows that jump to (First, Previous, Next, or Last) pages or by typing the page number
- **Undo and Redo** – Undo recent view change; redo recent view change
- **Search** – Searches for any text in the report
- **Sort** – Sorts records in the data buffer according to settings
- **Filter** – Set a series of conditions to reproduce the report by filtering the data buffer where data is cached
- **Save Result** – Saves the report result (see the next section for further description of Saving Reports)
- **Print** – Prints the report result
- **Refresh** – Refreshes the report display
- **Reset** – Resets the report display
- **Help** – Displays a detailed description of each JReport option

Figure 9.6: Example of JReport Help Window

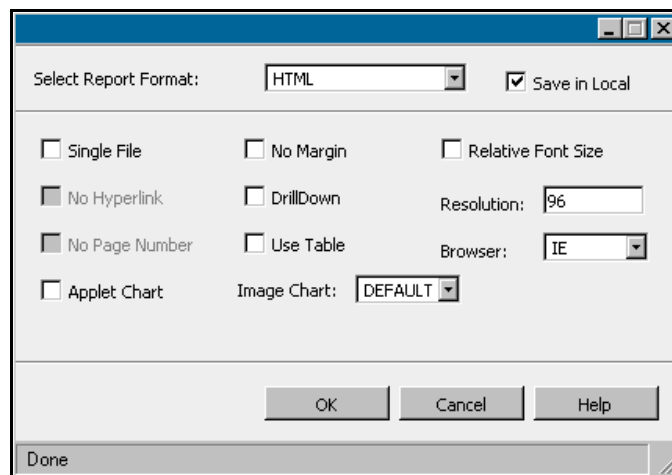


Saving the Report

To export and save the report:

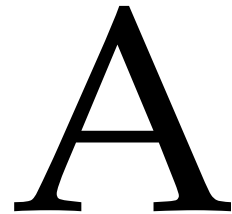
1. Click the disk icon in the toolbar. The Save panel is displayed.

Figure 9.7: Saving the Report



-
2. Select a format to save the report, such as HTML, PDF, TEXT, Excel, PostScript, Rich Text Format, or XML.
For any format except HTML, a check box labeled *Save in Local* is displayed. This check box enables you to save the report result to your local disk.
 3. Click **OK** to save the report.
 4. Set the options for the result format you selected.
Pull-down menus on this page include **Browser** (IE, Firefox, Mozilla), **Select Report Format** (HTML, PDF, Text, Excel, PostScript, Rich Text Format, XML), and **Image Chart** (Default, JPEG, GIF).

A P P E N D I X



I C O N R E F E R E N C E S

What's Ahead ...





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Definition of Status Columns








- **Operational Status** indicates current status in real time
- **Admin Status** indicates requested or desired (next) status and can only be Green or Yellow (i.e., a user can only request online or offline status)

Status Icon Definitions

Status icons are used for Resource Types, Resource Groups, Drives, System Health, Plug-ins, and Users.

-  Green – Online
-  Yellow – Offline
-  Orange – Initializing
-  Red – In Error State
-  Grey – Inactive

Work Order Process Icons

-  In-Process – Work Order is available for processing
-  Completed – Work Order has completed all tasks
-  Failed – Work Order has failed (at least) one task
-  Cancelled – Work Order was cancelled by a user
-  Queued – Work Order is waiting for resource availability
-  Paused – Work Order was paused by a user
-  Branched – Work Order execution has arrived at the start of parallel execution steps

CHAPTER

B

DASHBOARD QUICK REFERENCE

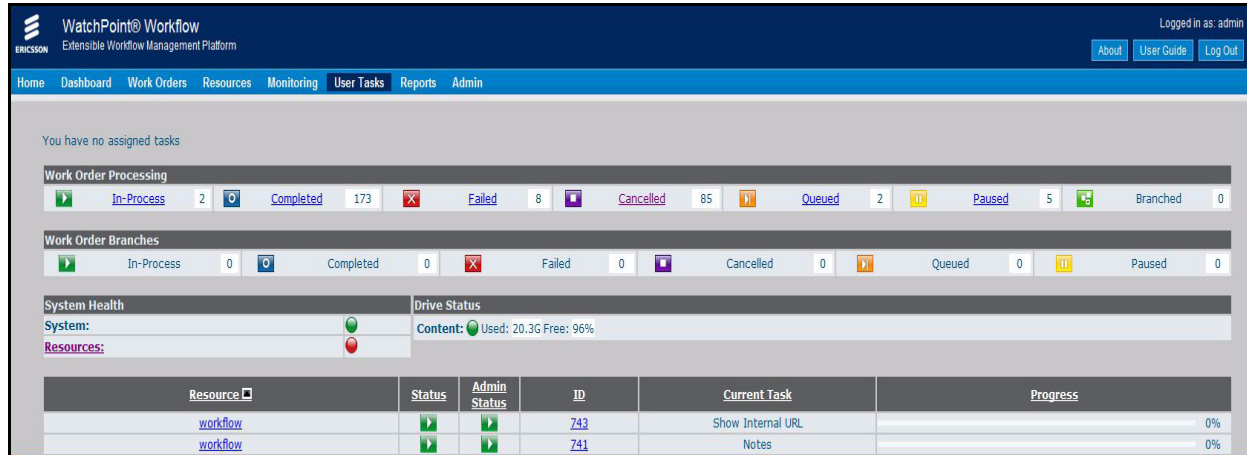
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Dashboard Overview

This appendix examines the Dashboard view and functionality. The Dashboard is comprised of multiple areas providing quick insight into different system elements.

Figure B.1: Dashboard Areas



Dashboard Areas

This section covers the dashboard's areas and their functions in the system.

Pending User Tasks

A user might have assigned tasks to complete. If the user has any pending tasks, a link near the top of the dashboard displays. The Dashboard link takes the user to the User Tasks view list.

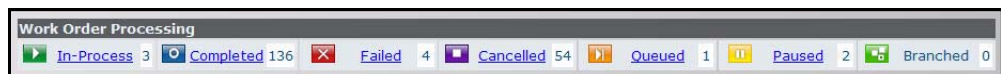
Figure B.2: Pending User Tasks

[You have 3 pending user task\(s\)!](#)

Work Order Processing

The Work Order Processing status bar at the top of the dashboard displays a tally of total work orders currently at each stage of the process. The Dashboard links take the user to the Work Orders view list, filtered for the status of the link. Click a status link to view a list of work orders currently in that state. If there are no work orders in the corresponding status, the link is disabled.

Figure B.3: Work Order Processing

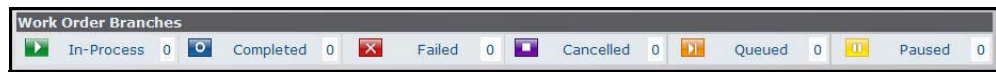


Branched Work Orders

When work order execution arrives a start of parallel execution steps, the work order is considered to be in a Branched status and is displayed in the Work Order Branches status bar. The Dashboard links take the user to the Work Orders view list, filtered for the Branched status, and display work

orders with tasks matching the status of the link (e.g., [Queued](#) displays Branched Work Orders with tasks Queued and waiting to be processed).

Figure B.4: Work Order Branches



System Health

The system health box indicates the status of the system and resources.

Figure B.5: System Health



System

- Green – The Alert Server is operational.
- Red – The communication between Alert Server (the server responsible for sending out alerts) and the WatchPoint System has been interrupted or the Alert Server is down.

Resources

- Green – The resources used by the Workflow System are operational.
- Red – One or more resources is in error state.

Click the [Resources](#) link in the *System Health* section of the dashboard to view a list of all resources. Failed resources (if any) display on top.

Drive Status

The drive status box displays the amount of free and used space for the available drives.

Figure B.6: Drive Status









- Green – Usage is between 0% and 50%
- Yellow – Usage is between 51% and 75%
- Red – Usage is between 76% and 100%

Resource Table

The Resource Table contains a list of resources (both system resources and human resources) currently being used for processing work orders.

Figure B.7: Resource Table

Resource 	Status	Admin Status	ID	Current Task	Progress
admin			400	Show Internal URL	0%
workflow			506	Show Internal URL	0%
workflow			401	Show Internal URL	0%
workflow			402	Show Internal URL	0%

If no resources are currently being used, there is no table and the following text displays: No Resources in the configured set of Resource Groups are currently being used.





Figure B.8: Message for No Resources

No Resources in the configured set of Resource Groups are currently being used.

Queue Tables

Queue tables correspond to resource groups defined in the system. Each table displays the work orders in the queue waiting to obtain resources from the group.

Figure B.9: Queue Table

Quality Control Queues: 2					
Priority	Status	Admin Status	ID	Current Task	Template
NORMAL			743	Show Internal URL	URL - v8
LOWEST			741	Notes	Title - v5

If there are no work orders in the queue, the queue table does not display. Each table contains up to five work orders. The number next to the queue title indicates the total number of work orders queued for that task. Click the [queue title link](#) to see additional details of the resource group queue, or click the work order [ID](#) to see additional details of that specific work order.

GLOSSARY OF TERMS

A

Adaptor: Facilitates communication between external resources and WatchPoint, by using WatchPoint Communication Language (WPCL).

Automatic Task: Tasks defined within a work order template that can be executed without any manual action taken.

C

CableLabsVOD1.1: Uses the constructs of the CableLabs ADI 2.0 Specification Asset Structure [ADI2] to specify metadata for the distribution of a Video-On-Demand show from a Provider to one or more cable operators using Video-On-Demand Content Specification Version 1.1.

E

External System: Hardware or software element used as a resource in the workflow, including those provided by TANDBERG Television as well as by third parties.

H

Human Resource: Resource type used to represent personnel and users assigned to perform a manual task within the work order template.

I

IPTV: Internet Protocol television; the delivery of programming by video stream encoded as a series of IP packets. I

M

MPEG: Moving Pictures Expert Group. MPEG is an international standard for video compression and desktop movie presentation. A special viewing application is needed to run MPEG files on your computer.

MSTV: Microsoft TV which provides integrated audio, video and data services over a single network.

P

Package: A package is an entity consisting of a group of assets that is used for distribution of content. It contains one or more assets and metadata. The package is the unit that

is transmitted over the distribution interface and is the means by which a version of a product is disbursed.

PDA: Personal Digital Assistant, a mobile device which functions as a Personal information manager and has the ability to connect to the internet.

Plug-in: A plug-in provides communication between a defined resource and the WatchPoint System.

R

Resource: External system or entity that is assigned to perform a task or tasks within a work order template. In most instances, this is hardware or software used by the workflow process but also includes personnel performing any in a wide range of tasks including quality control checks, validations, and notifications.

S

Server: A computer system or software that manages and delivers information to client computers.

STB: Set top box, a television device that converts signals to viewable images.

T

Task: Specific action or process within a work order template. A task can be automatic, manual, or looping. Tasks are assigned to resources.

U

User Task: Tasks defined within a work order template that require human resource to manually execute

V

VOD: Systems which allow users to select and watch/listen to video or audio content on demand

W

Work Order: An individual instance of a workflow process based on a work order template

Work Order Template: A formal definition of a business process including its flow logic, tasks, and resources

Workflow: The movement of assets or tasks through a work process, or the operational aspect of a work procedure: how tasks are structured, who performs them, what their relative order is, how they are synchronized, how information flows to support the tasks, and how they are tracked.

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