

SYSCOM User Administration Facility

Introduction

The SYSCOM User Administration Facility (UAF) is a framework that can be used to provide a single front end for user administration while providing transparent support to access (for queries, creations, updates, deletions, etc...) one or more back-end user administrative system (such as MQSeries Workflow Runtime, MQSeries Workflow Buildtime, LDAP, etc...). The facility is used to simplify the creation of user administration clients and the synchronization of user information across potentially very different user administration systems.

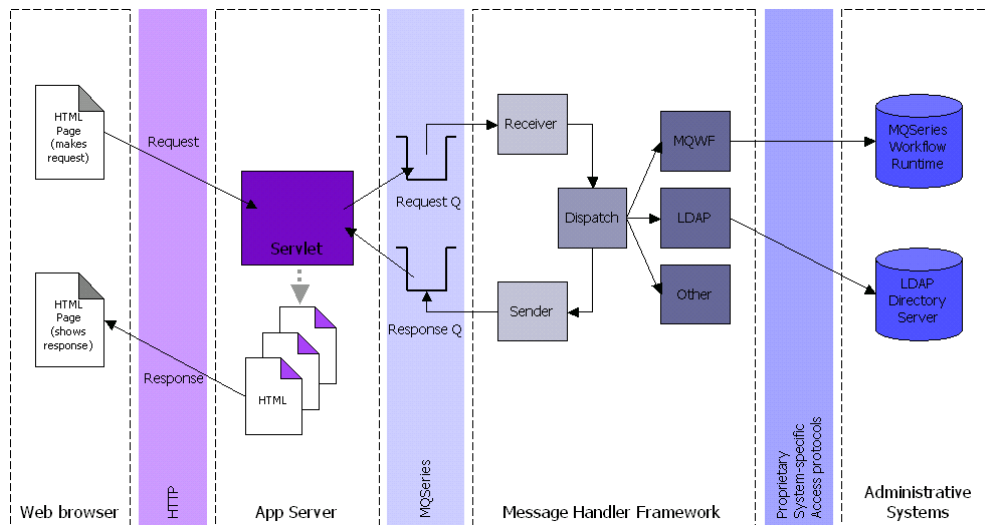
With the UAF as a back-end to a user administration client, the client only needs to send XML-based requests to perform user/staffing-related queries, creations, updates, or deletions to the UAF. The UAF replies to the request with an XML-based response containing the result of the requested operation.

Since the information exchanged between UAF server and client(s) can be sensitive, the UAF provides encryption capabilities to protect the content of the exchange.

The UAF is based upon the SYSCOM Message-Handling Framework and therefore provides the basic extensibility, load management, application administration, and logging features as those made available through the MHF.

Functional overview

The diagram below presents the major components involved in the UAF. The server side of the facility is based on the SYSCOM Message Handling Framework to facilitate the creation and deployment of service-like administrative system access components. All systems components within the Message Handler Framework and in the Administrative Systems tiers represent the Enterprise Systems tier. The Enterprise Systems tier entry point is represented by WebSphere MQ queues, one for input (requests), and one for output (responses). The Web tier is represented by the User Administration Facility servlet. The servlet acts as a client to the Enterprise Systems tier. The Web browser section represents the Web Client tier – the Web client tier is implemented as simple HTML documents (i.e. ultra thin client).



Note: Although the client represented in the diagram above is Web-based, a UAF client is any application capable of producing and parsing XML content and capable of exchanging messages with the UAF through MQ Series queues.

High level framework design

User Administration Server

The UAF is implemented as nodes of the MHF. With the flexibility provided by the MHF, administrative systems can be added to the facility without necessitating coding changes to the other parts of the framework. Additionally, the MQ-based communication layer could be changed to RMI or RMI/IIOIP without any design or coding impact on the other nodes (other than the receiver/sender pair) in the facility.

The server side of the facility is divided into four component types:

- User administration message receiver
- User administration message dispatcher
- User administration message services
- User administration message sender

Receivers and senders receive and send MQ messages respectively. The dispatcher determines what service(s) user administration messages should be routed to. The services are the common interfaces to the actual enterprise systems such as MQSeries Workflow, Netscape Directory Server, etc...


User Administration Client

MQSeries Workflow Administrators have needed a simple tool to allow them to add, modify and delete users in the MQSeries Workflow Runtime environment. As with the MQW Runtime environment, it is important to modify the MQW Buildtime environment to keep modeling synchronized with the Runtime environment. To address this need, SYSCOM has created a web-based workflow user administrator tool, the SYSCOM User Administration Client (UAC).

The SYSCOM User Administration Client (UAC) can be used to provide a single graphical front end for user administration, and, when combined with the SYSCOM User Administration Facility (UAF), provides transparent support to access (for queries, creations, updates, deletions, etc...) one or more back-end user administrative system (such as MQSeries Workflow Runtime, MQSeries Workflow Buildtime, LDAP, etc...). The facility is used to simplify the creation of user administration clients and the synchronization of user information across potentially very different user administration systems.

This tool is designed to provide the user with a graphical interface that can be customized to fit the needs of User Administration. Design services are provided to determine the appropriate requirements. SYSCOM will then assist with the design, delivery and deployment of the newly customized version of the UAC on the clients MQSeries Workflow system.

The primary focus of the UAC is to develop and deliver a web-based User Administrator interface to add, update, or delete a workflow user. The user may configure this tool to be used by multiple administrators with appropriate authorities. The UAC Users logon to the workflow system with the appropriate authorities to use this tool. Once the user is authenticated to use this tool, the UAC presents a web-based graphical interface that will enable the user to maintain users in the workflow system. This interface determines if the user is already defined in



The screenshot shows a web browser window titled "Syscom Admin Client - Manage User Properties - Microsoft Internet Explorer". The address bar shows "http://skisuu/MQWFCClient/forms/AddUser.jsp". The page content includes the SYSCOM logo and the text "MQSeries Workflow Admin Client". Below this is a tabbed interface with tabs for "General", "Assignments", "Authorization", "Substitution", and "Description". The "General" tab is active, showing a form with the following fields:

*User ID	rdiscartes	*Person ID	rdiscartes
*First Name	Rene	Middle Name	C
*Last Name	Discartes	*Level	0
*Phone 1	(816)555-3456	Phone 2	(913)888-7890
*System	FMCSYS	*System Group	FMCGRP

At the bottom of the form, there is a note: "* indicates required fields". Below the form are three buttons: "Add", "HOME", and "Cancel".

the workflow system, providing an opportunity to add a new user to the workflow system.

The user details will be shown on an interface having the following sections

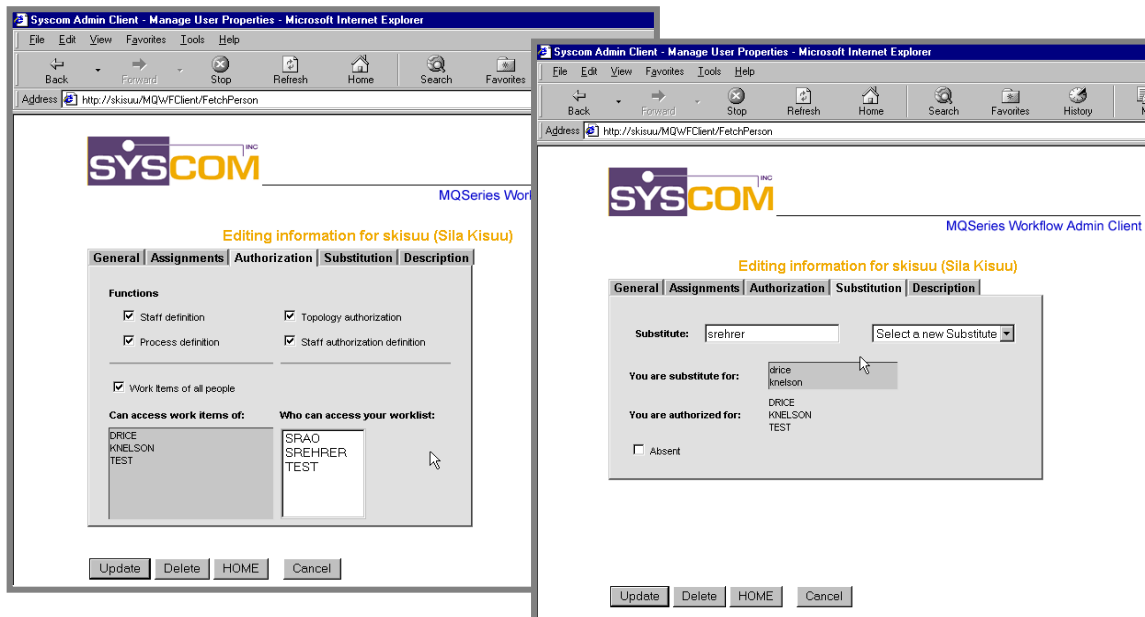
- General
- Assignments
- Authorizations
- Substitution
- Description

In additions to these sections, this interface will also provide the following options

- Add - add a new user
- Update - update an existing user
- Delete - delete an existing user
- Home - select another user to maintain

A user FDL is generated from these details. This FDL is then used to update to the Runtime and Buildtime environments. A log for the updates to these environments is also maintained.

Several customer/solution-specific front-ends have been created for the UAC. The following depicts two of these views. The functions and fields available in MQSeries Workflow Buildtime are included in the combination of these views. Because this is customizable, you have the ability to combine and present only the appropriate information to those that administer your system. For Java-based UAC clients, a set of Java classes are available to significantly simplify the process of building and sending UAF requests, and receiving and parsing UAC responses.



For more information...

If you would like additional information about the **SYSCOM User Administration Facility**, or, if you would like to engage SYSCOM in your project, please contact us at Sales@SYSCOM.com or:

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