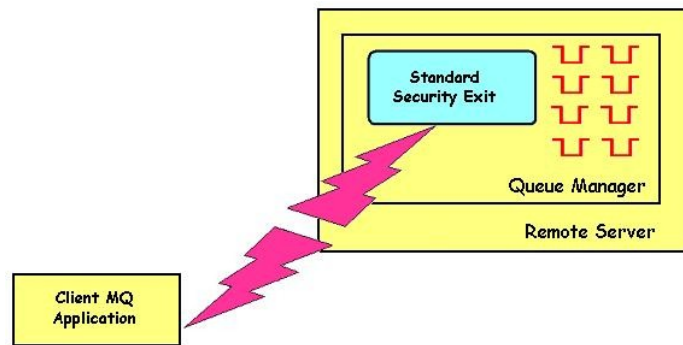


MQ Standard Security Exit for z/OS Overview



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1 Introduction

1.1 Overview

MQ Standard Security Exit for z/OS (z/MQSSX) is a new solution that allows a company to control and restrict who is accessing a WebSphere MQ resource. The security exit will operate with WebSphere MQ v5.3.1, v6.0 or v7.0 for z/OS environments. It works with Server Connection, Receiver, Requestor and Cluster-Receiver channels of WebSphere MQ queue manager.

The MQ Standard Security Exit for z/OS solution is comprised of a server-side security exit.

The server-side security exit has the ability to allow or restrict the incoming UserID. The server-side security exit uses a regular expression parser to parse the incoming client UserID against a predefined regular expression pattern.

The server-side security exit supports the concept of 'Proxy IDs'. After a user has been successfully validated against the native OS or file based validation data and the 'Proxy Mode' flag is set, then the security exit will look up the user's UserID in the Proxy file for their Proxy ID. The Proxy ID will be used for all MQ interactions.

The server-side security exit has the ability to allow or restrict users from connecting with a blank UserID value. This is controlled by the server-side security exit's property keyword 'AllowBlankUserID'.

The server-side security exit has the ability to block users from logging in with the 'CHIN' or the CHIN's Started-task UserIds. This is controlled by the server-side security exit's property keyword 'Allowmqm'.

The server-side security exit has the capability to allow or limit the incoming channel connections according to the name of the associated Server Connection channel (SVRCONN). Each Server Connection channel can be allocated a maximum number of connections and the server-side security exit will ensure that this maximum is not exceeded.

Client connections to a queue manager are limited by either channel name or the 'DefaultMCC' property keyword in the initialization file. In today's use of J2EE applications, it is a possibility that one J2EE application could overwhelm the queue manager with client connections, thus preventing any connections being made from other applications.

The server-side security exit has the ability to allow or restrict the incoming IP address. The server-side security exit uses a regular expression parser to parse the incoming client IP address against a predefined regular expression pattern.

1.2 Executive Summary

The MQ Standard Security Exit for z/OS solution is comprised of a server-side security exit.

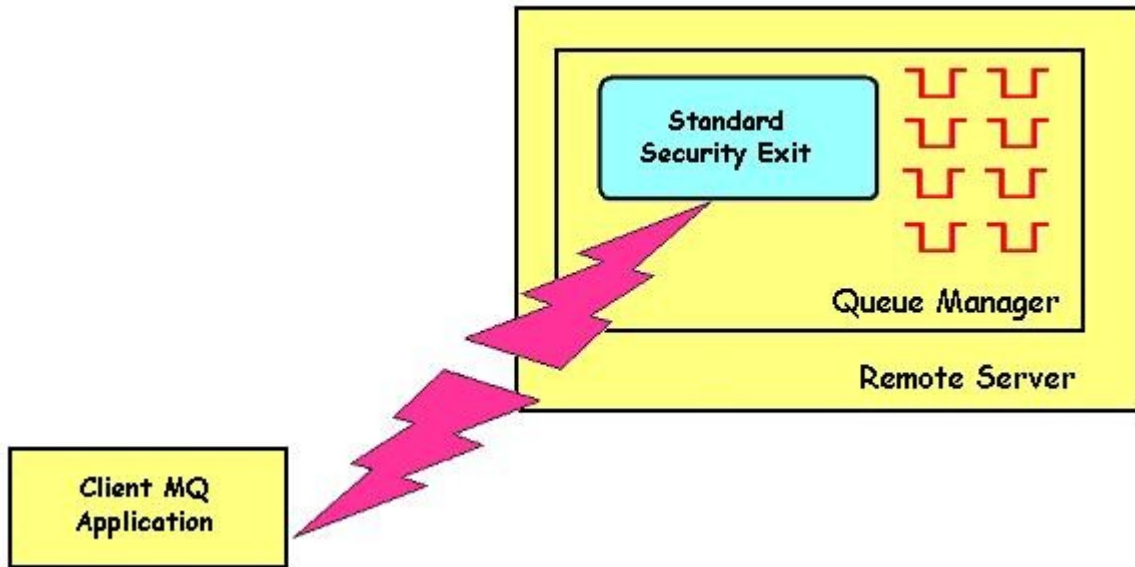
The server-side security exit is available as:

- z/OS load-module

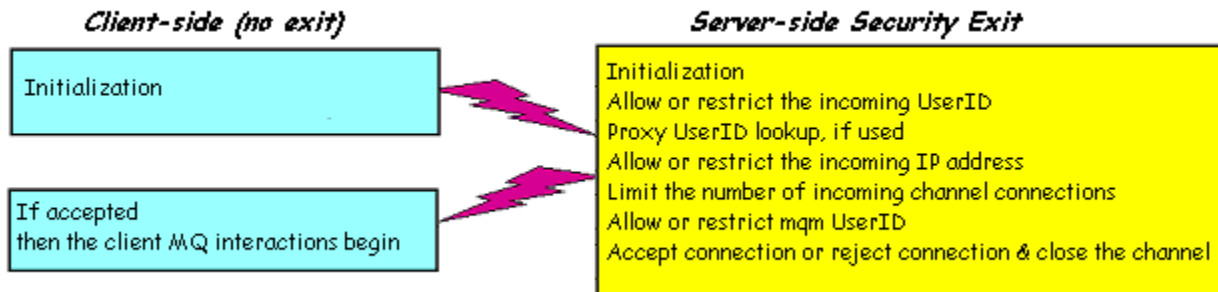
The major features of MQ Standard Security Exit for z/OS are as follows:

- Allows or restricts the incoming UserID against a regular expression pattern
- Provides support for Proxy UserIDs
- Allows or restricts the incoming IP address against a regular expression pattern
- Limit the number of incoming channel connections on a SVRCONN channel.
- Allows or restricts the use of 'CHIN' or the CHIN's Started-task UserIds
- Provides logging capability for all connecting client applications regardless if they were successful or not.
- Provides logging capability via Write To Operator (WTO) facility.

1.3 Context Diagram (Logical View)



1.4 Security Message Flow (Logical View)



1.5 Prerequisites

This section provides the minimum supported software levels. These prerequisites apply to both client-side and server-side installations of MQ Standard Security Exit for z/OS.

1.5.1 Operating System

MQ Standard Security Exit for z/OS can be installed on any of the following supported servers:

1.5.1.1 IBM z/OS

- IBM z/OS v1.4 or higher

1.5.2 WebSphere MQ

- WebSphere MQ for z/OS v5.3.1, v6.0 and v7.0