

Manage IWS Services within MDCMS

from Midrange Dynamics

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Overview

IWS (Integrated Web Services) are REST or SOAP services that run within Web Services application servers on the IBM i. These services utilize either ILE programs, Service Programs or SQL statements in order to process http requests.

MDCMS can be used to easily request, distribute and deploy IWS services to Web Services application servers. This is done systematically by executing QShell statements when the properties file that describes a service is installed or deleted.

Configure MDCMS for IWS Service Management

Attribute Settings

For each target instance of Web Services server, create an MDCMS attribute with the following parameters:

Parameter	Description
Application	Target Application code of environment
Level	Target Level number of environment
Object Type	*IFS
Attribute	Attribute ID to use, such as name of the server
Object Library	The target IFS path where the properties file and xml file for a service should be copied to

Parameter	Description
Server	the case-sensitive name of the Web Services application server

Reusable Object Commands

For each attribute, a Reusable Object Command should be defined, so that the service will automatically be added or removed from a Web Services server at installation time.

Use the following parameters to add/change a service:

Parameter	Description
Application	Target Application code of environment
Level	Target Level number of environment
MDCMS Attribute	The name of the created IFS attribute
Object Name	*.properties - this ensures the command only runs for properties files and not additionally for xml files
Reason	C=Create
Ignore Errors	No
Type	3=Post-Installation
Keep MD Libs in Libl	Yes
Command	<p>MDADDIWS PROFILE('##OBJLIB###'##OBJNAM##') SERVER(##SERVER##)</p> <p>LIB(library) LIBL(library list)</p> <p>where library = the library where the ILE program or database is located</p> <p>where library list = the list of any additional libraries that are required to be in the library list when the service is invoked. Format for LIBL is LIB1, LIB2, ...</p>

Once the MDADDIWS command is added, copy it and modify the following parameters for removal of a service:

Parameter	Description
Reason	D=Delete
Command	MDRMVIWS SERVER(##SERVER##) PROFILE(##OBJNAM##)

Request to Add/Change a Service

It is highly recommended to utilize a development Web Services server, staged outside of the MDCMS migration path, to correctly define a service.

Services are defined from the IBM Web Administration for i web application.

Once defined, go into MDOpen for VS Code 8.6+, MDOpen for Web, or MDOpen for RDi 8.7+ and select option Import->Import IWS Service from the connection menu.

The Import IWS Service option allows you to generate the properties and xml files for a service and/or request the deployment of those 2 files.

Parameter	Description
Appl	Target Application of a server environment
Level	Target Level of a server environment
Project	The MDCMS Project to assign the requests to
Task	The MDCMS Task to assign the requests to
Subtask	The MDCMS Subtask to assign the requests to
RFP	The MDCMS RFP to assign the requests to
Lock Request	If the object requests should be locked for deployment

Parameter	Description
MD Attribute	The IFS attribute defined for the deployment of the properties and xml files for a given Web Services server
Developer IFS Object Directory	If generating the IFS files, this is the IFS path that the files should be generated into. If requesting the IFS files, this is the IFS path where the files will be migrated from.
IWS Server	The case-sensitive Web Services server name. This should be the name of the development server where the service is already defined.
IWS Service	The case-sensitive Service name of the defined service

Button	Description
Generate and Request	The IFS files will be generated from the definition for the service and the files will be requested for promotion
Generate Only	The IFS files will be generated from the definition. Request-related parameters can be ignored
Request Only	The IFS files will be requested for promotion. Generation-related parameters can be ignored
QShell Log	If the generation fails, the QShell Log button will appear. Click it to view the log in order to troubleshoot the problem.

Assuming the Reusable Object command definition is in place to use the MDADDIWS command, the service will be added or modified for the server named on the attribute for the used combination of Appl, Level and IFS Attribute when the RFP is installed.

Request to Remove a Service

Use the New Object Request from IFS Contents, IFS Search or anywhere the option New Object Request is available.

Create the request for the properties file (and optionally for the xml file as well) with reason = D=Delete.

Assuming the Reusable Object command definition is in place to use the MDRMVIWS command, the service will be removed from the server named on the attribute for the used combination of Appl, Level and IFS Attribute when the RFP is installed.