Information Builders

iWay

iWay Release Notes

Version 8.0.3 Service Manager (SM)

April 16, 2019

Contents

Chapter 1

iWay Version 8 Service Pack 3 (8.0.3) Integration Release

This document provides release information for iWay version 8 Service Pack 3 (8.0.3). It is intended for all levels of users, including system integrators, application developers, and administrators. For more information on specific features, refer to the online documentation.

In this chapter:

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iWay Service Manager

iWay Service Manager (iSM) is an integration server that ensures rapid access to timely, accurate data across all systems, processes and stakeholders – with unmatched interoperability between disparate systems and data. With iSM, all aspects of your existing infrastructure – every integration, application, and development platform – work in concert with modernized architectures to rapidly develop new business applications, and create powerful, reusable business services from existing applications. This support for modern architectures ensures a highly optimized development environment and rapid creation of internally and externally consumable services.

iSM offers end-to-end integration of the widest variety of sources, including real-time, batch, streaming, big data, structured and unstructured information, cloud-based sources, social network, and machine-generated data.

Installation Notes

This section provides installation notes for iWay 8.0.

❏ Major releases of iWay version 8.0 and any service pack releases require Oracle Java version 8 as the minimum run-time environment. The recommended release is Java 1.8 build 152. Java versions 9 and 10 are not supported at this time.

❏ Major releases of iWay version 8.0 and any service pack releases require Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files, which can be obtained from the Oracle Java download.

❏ iWay version 8.0 can be installed on the same environment where previous versions of iWay Service Manager (6.x and 7.x) have been installed. You must follow the proper procedure to migrate an application from a previous version to iWay version 8.0. iWay version 8.0 cannot be overlaid on top of an older version, and must be installed in parallel into an empty location (directory) on the file system.

❏ iWay version 8.0 includes online documentation, which is located on the iWay Information Center and can be accessed using the following URL:

http://iwayinfocenter.informationbuilders.com/technical-library.html

❏ iWay version 8.0 does not provide a 32-bit installation, only a 64-bit installation is supported. The installation requires administrative rights for installation and runtime purposes. iWay version 8.0 requires full access to the sub-directories of its installation. As a result, ensure that the end-user has full access rights.

❏ On Windows platforms, a deployed iWay Integration Application (iIA) will create its own corresponding Windows service. This Windows service is not recreated with each iIA deployment and will retain its properties.

❏ The release level of iSM must match the release level of iIT. For example, if you upgrade iIT, then you must upgrade iSM to the corresponding version. iWay 8 releases no longer facilitate the use of core services, which were present in the iWay 7 framework. This is due to simplification and to ensure that the user always has matching design time and runtime environments to get the benefits of new features.

Migration

iWay version 8.0 allows you to migrate iWay Integration Applications (iIAs) that were developed in iWay 7.x environments to an iWay 8 environment. When discussing migration, it is important to distinguish between *runtime* and *design time*, as described further in this section.

Runtime

If you are not planning to make any modifications to an existing iIA, then you can simply export this iIA from your iWay 7.x runtime environment using the iSM Administration Console. You can then import the iIA into your iWay 8 runtime environment using the iSM Administration Console. This enables you to import the iIA and the corresponding deployment template. You can then deploy the iIA. The iIA will continue to run the same in your iWay 8 environment as it did in your iWay 7.x environment.

Design Time

If you need to update an existing iIA for maintenance or review, you can do so using iWay Integration Tools (iIT). Export the corresponding Integration Project from iWay 7.x to the file system or source management repository. You can then import or check-out the Integration Project into the iIT workspace of your iWay 8 environment. When the Integration Project is imported, the components will be automatically converted into iWay 8 format. Since objects have changed between iWay 7.x and iWay 8, the best attempt has been made to convert the objects accordingly. However, you may notice that some of the iWay 7.x objects show up as Service nodes in the iWay 8 process flows. However, aside from the visuals, the migrated Integration Project is fully functional. You can then build and deploy your iIA as required.

It is recommended that you review any iIAs developed using iWay 7.x to determine if the design is utilizing all of the latest features available in later releases. It is very common to discover that some parts of the iIA (even though it will continue to function as is), might benefit from a simplification as part of the update, instead of a direct migration.

Deprecated Components

This section provides a summary of deprecated components in iWay 8.

❏ MQSI components have been removed from the product and are no longer supported in this release. If you have a requirement for continuing support for this and related components, please contact iWay Customer Support.

❏ SOAP over JMS/MQ has been removed from the product and is no longer supported. For alternative approaches, you may use a direct connection to the JMS/MQ components for data processing.

❏ WAR-based deployment has been deprecated. The ability to create WAR packages has been removed from the iSM Administration Console. You can build iSM WAR packages using the iWay Software Development Kit (SDK). If you require WAR-based deployment support, please provide your use case to iWay Customer Support.

❏ The Log Event Adapter for Microsoft SQL Server has been deprecated from this release.

❏ The Emitter object has been deprecated from this release in iWay Integration Tools (iIT). Emitters can be used as part of the channel itself. If you have a use case for accessing Emitters in process flows, open a case with iWay Customer Support and provide full details.

❏ The following product components have been deprecated and removed from distribution. There are alternatives approaches for achieving the required functionality or the components are deemed no longer viable.

   ❏ Corba

   ❏ Fix

   ❏ Clarify

   ❏ Tuxedo

   ❏ BEA JDBC

   ❏ BEA PS

   ❏ IBO

   ❏ Validation (an older implementation of the QA Service)

   ❏ CS3

   ❏ Lawson Preparser

   ❏ Manugistics Preparser

   ❏ CDF/CSV (an updated version is available for flat file processing)

Resolved Issues

This section provides a reference to the resolved customer cases in iWay version 8.0.3, iWay version 8.0.2, iWay Integration Tools (iIT) 8.0.1 Update 1, iWay version 8.0.1, and iWay version 8.0.

iWay Version 8.0.3

This section provides a reference to the resolved customer cases in iWay version 8.0.3.

IRN Number	Summary
180924016	Unable to import a JSON schema in iWay 8.

IRN Number	Summary
180919119	Listener based on an SQL query is limited to a single line in the Query field.
180827100	iWay SDK: BUILDAPP should create required ITA files from iwtemplate files.
180520004	Transformer Group Aggregation Error.
180321055	BUG: Transform sorting removes segment level.
171102038	NFR: Default value for the Replace function in Transformer.
190220106*	OEI custom version of the 310 EDI does not calculate SE01 count.
190129100	X12 IEA control number is left justified.
181204027	CSV parser does not correctly escape column separators within the quoted column value.
181120043	SWIFT MT541/543 inbound types are failing in PROD.
181016113	Controls Listeners Service (com.ibi.agents.XDControlAgent) does not find listeners using a wildcard suffix as indicated by the *Listener(s)* parameter.
181002093	The _if() function (Obtain Value Conditionally) returns unexpected false results when the condition evaluates as true.
180427038	SFTP: Intermittent error with two different SFTP servers. JSch: Invalid encoding for signature.

IRN Number	Summary
180823038	Users with an Active Directory (AD) account can access the base configuration in read-only mode without monitoring rights.
180716012	New feature request to allow support for data providers in database listeners.
180525082	Envoy must be SSL-enabled.
180606084*	Add name for managed server to the SNMP output.
180118050*	Centralize SNMP monitoring per iSM instance, not per managed server (master agent).

Note: Cases denoted by an asterisk (*) indicate that the case was resolved outside of programming by changes to the existing configuration or providing additional instructions.

iWay Version 8.0.2

This section provides a reference to the resolved customer cases in iWay version 8.0.2.

IRN Number	Summary
23363529	iWay BAM console does not show transactions (with SQL Server).
171108066	XDSFTPEmitAgent: Need MFT feature as in XDNFTPEmitAgent.
180117068	The iwsystray.exe file needs to be signed, which currently prompts for User Account Control in Windows.
171208047	How do you disable the external entity expansion feature in the server's XML parser?

IRN Number	Summary
180302065	Since switching from TDS LDAP to AD, Magnify iWay process flows are generating HTTP errors.
180309008	How do you convert time on the server by time zone?
180215073	Base - SOAP channel - must use the *blue* console, can't restart secure SOAP channel.
180405031	nAS2 Listener	Async MDN Dispatch	Support for Basic Authentication.
180405030	nAS2 Emit Agent	Support for AES-256 Encryption Algorithm.
180410069	RVI Gateway listener special register button does not return register names.
180313052	XML to JSON conversion needs to add an array.
180411032	PGP Decrypt Preparser is sending error documents through the process flow.
180327040	MQ fails to connect to MQ using SSL.
180510052	NFR MQ Emit object password validation.
180308030	MQ Emitter in Iterator holding connection to queues until process is complete.
180509074	Failover iSM server instance continues to process redundantly after re-syncing with the primary iSM server instance.
180511066	SFTP Direct File Transfer - Timeout?
180607050	The XDNHttpEmitAgent fails to parse a text/XML response that is valid XML. Other tools work fine.

IRN Number	Summary
180514024	Deployment errors continue to occur (blocked or exception exploding).
180614031	Does iWay version 7.0.6 support Excel 2013 (.xlsx) files?
180619004	File Agent fails to report an error (it does on the log) when failing to rename the *iwaytemp* file.
180801063	SWIFT 2018: MT564 E2 22F bad rule.
180823031	HIPAA 999 acknowledgement file fails on error in NM1 segments.
171020012	Transformation Execution	Output Differences	iIT Test vs. Runtime
180205051	SSH Provider in Deployment Template Builder has old options for SSH Factories.
180507081	iIT 8.0 property description formatting is displayed incorrectly
180510034	The MQ Emit agent in iIT is prompting for a password even though authentication is set to *false*.
180511018	RDBMS adapter does not support data source.
180530056	Process flows from a 7.0.7 project imported into 8.0.1 fail to compile.
180530056	iIT 8.0.1 - Exception - Cannot locate compiled version of process flow.
180613020	iWay 8 API endpoint containing a Join object generates an error.

IRN Number	Summary
180713031	Unable to open process flows in iIT version 8 (when migrated from iWay version 6.1).

iWay Integration Tools 8.0.1 Update 1 (8.0.1.R20180719-1955)

This section provides a reference to the resolved customer cases in iWay Integration Tools (iIT) 8.0.1 Update 1 (8.0.1.R20180719-1955).

IRN Number	Summary
IIT-550 / 180530056	Process flows from a 7.0.7 project imported into 8.0.1 fail to compile.
IIT-539	The required MQ password field setting is not honored.
IIT-532	Wrong encoding in process flow.
IIT-565 / IDEV-38	Add the ability to drag and drop an adapter from the Integration Explorer tab to the Process Flow Designer.
IIT-556 / 180604074	Upgrading IIT from version 7 to version 8.0.1.
IDEV-37	Annotations in process flows created in version 7.0.6 are not being migrated to version 8.0.1.

iWay Version 8.0.1

This section provides a reference to the resolved customer cases in iWay version 8.0.1.

IRN Number	Summary
180308030	JMS Emitter in Iterator holds connection to queues until a process is complete

IRN Number	Summary
180302042	NPE when trying to SSL, enable the iSM application
180221062	First element derived from inbound CSV is being corrupted
180201043	com.ibi.nftp.client.XDFTPSClient cannot be cast to com.ibi.nftp.client.XDFTPClient
180221026	What is the highest version of MQ supported by iSM 6.1.5?
180226066	Data field beginning with an unmatched apostrophe corrupts data
180223037	_length function generates an exception on missing SREG
180215016	iSM 8: Using _sreg parameters as query-parameters for the REST service
180216022	iFL call generates an exception during startup
180125046	BAM Driver generates the following error: "Error in transaction, while inserting into sreg and channel info table"
171214056	Security Provider defined for JKS KeyStore does not work when connecting to MQ using JMS
171205055	SAP listener fails on receipt of document from SAP: com.sap.conn.jco.AbapException
171208052	XDXQueryAgent does not output TREE trace in the iSM log
171218066	LDAP NFR/Change to Support SOX External Audit Compliance

IRN Number	Summary
171107077	iSM 7.0.7 FTP cache does not connect to FileZilla server 0.9.60.2 when minimum TLS version is set to 2
171130071	iIA with two SOAP listeners: One seems to be the "primary". The second listener does not work if the first listener is stopped.
171127064	LDAP Directory Provider does not support StartTLS
171115094	Secure SOAP channel does not create WSDL?
171108068	XDSFTPDirectFileTransfer missing Put File Protection: Please add
171110045	Creating a Secure Shell Provider requires an Authentication Realm to be created in the base configuration
171114032	Passing parameters from a channel to shutdown a process flow
171108034	NFR - Force a template to use the master user ID / password if not supplied in the template
171102032	JMS Emitter dropping the message in base64 format
171005039	How do I save an FTP transaction log within a process flow?
170802087	LDAP - Is there any way to add a user to an existing Active Directory group using the LDAP adapter?
170519046	NFR: LDAP password management (second part of COTY case)

IRN Number	Summary
170419047	MQ Emitter for Clustered Queues
170621090	BAM resubmit functionality: Queue not defined
161111050	BAM Correlation History query taking a lot of database resources
120153539	BAM errors when numerous User Defined columns exist
180327040	MQ Listener using SSL fails to connect to MQ after Application deployment from iIT.
180215026	Changing Content-type header does not update on second request
180207073	iIT 8: Cannot copy pre-execution / post-execution items between objects
171110048	Command console display issues in the iSM Administration Console

iWay Version 8.0

This section provides a reference to the resolved customer cases in iWay version 8.0. Some of the cases listed in the following table have also been patched to the iWay version 7.x level and have been provided as updates in iWay version 7.0.7 and higher. These resolved issues are also included in any upcoming service pack releases.

IRN Number	Summary
170322037	IPv6 addresses don't work with BAM
170920062	Secure iWay Administration Console
171017020	Need assistance determining connection setup for a BI execution object

IRN Number	Summary
171110017	Unable to execute the same web service twice
170628003	SWIFT 2017 - MT535 _90a tag has incorrect ordering of tags in schema
171010067	FTP Agent checking more than necessary directories for an absolute file path
170905002	BAM - Parse And Validate Error
170602012	FTP Dir List Agent with Creation Date and Time
170419047	MQ Emitter for Clustered Queues
160524013	IRN#160524013 xQuery in _IF	iFL Compilation Error
170920037	Adapter - got exception: java.sql.SQLRecoverableException: Closed Connection[StoredProcedure
171017050	HIPAA - errors seen processing 837P EDI files with new Ebix file provided in case (170927058)
171026024	HTTP Emit Agent does not emit document when content is stream
170124088	Feature request - SFTP - Add Validate Host Keys \ Host Key Repository in service properties
170412006	URL encoding error in listener (or my understanding of how it works)
170227070	Add read to EOL to NTCP listener
170127045	Another FTP connection that will not work

IRN Number	Summary
170915006	Channel Redeployment issue
170907055	iSM 7.0.7-P2064.1537 - Error on "put protection" file rename after upload of initial file
170920080	Add another super user / group equivalent to ism.admin
170519046	NFR for role of ism.admin LDAP group in console
170907053	Since upgrading to iWay version 7.0.7, the logs are filling up with "ActiveSession" logs at the rate of one log-per-hour
170720085	The JCRAFT API In ISM 800 Needs To Be Updated From Version 0151 TO 0154
170713046	Our ISM/iWay environment suffers from JVM problems
171006037	HIPAA - errors seen processing 837I EDI files with old and new ebix file provided in case (170927058)
170815027	iWay Service Manager Production License Key Request
161209020	Microsoft Excel tool adapters
170324062	Need to confirm SFTP agents will work with SHA-2 (Prudential is discontinuing SHA-1 support)
170822051	iSM 7.0.5 - FTP agent (not sure which one) - logging "INFO" when I think it should be "DEBUG"
170803013	SFTP emitter - only moves 2 GB for a 4 GB file

IRN Number	Summary
170908058	XDFTPClientSterlingUnix - getFTPFile - double path on GET (see 170228094) ComData - Sterling Unix
170629085	iSM 7.0.7 - TLS FTP connection - No trusted certificate found
170809072	XDSQLInsert agent will not accept _flatof() as a value for a User Properties value
170508097	NRF - Want NHTTP listener option to generate an event for POST request
170412046	iWay Cloud Roadmap for BNS
170511059	XDFailAgent - pflow 7.0.5+, Properties has Bypass Catch Processing, XML missing nocatch PROPERTYITEM
161206067	Need a way to get Hex Values to be selectable when creating X12 data
170725031	ISM for MS Dynamics - Azure Bus
170628033	POC support for Kafka
170515062	File Listener Improper File Reprocessing (8,000+ IDOC upload to SAP)
161219101	Enhancement Request: Schedule Provider Next \ Last Run showing per selected calendar time?
170110025	Pipe with header channel is not stripping out the header record before processing
170412038	Nine digit issue in HWM listener.
170203089	XDSFTPEmitAgent not falling back to SCP like XDSFTPDirectFileTransfer does? (file is as directory?)

IRN Number	Summary
170228094	XDNFTPDirectFileTransfer - Not working with ComData (problem when home DIR is not ROOT?)
170321043	iWay is putting a double path when doing an SFTP Dir List when home folder is not root - FirstData
170202086	XDNFTPDirListAgent (ftp.theworknumber.com): Unable to setup file list; '/' is either missing...
161107007	Temp space filling up by iWay Clob queries
160518037	IRN#160518037 TPN web page is not showing anything after signing on
170516027	User can not log into FTP
170612101	iSM 7.0.7 FTP Server listing filenames with directory structure as name
170411007	nHTTPEmitAgent	POST	MultiPart Data	Content-Type
161021032	Envoy startup issues - random?
170314012	Oracle Apps Procedures schemas are generated with invalid namespace
170103055	XDNFTPEmitAgent - Unexpected exception not triggering catch?
161104067	FTP Operator Delete: General failure: 451 Requested action aborted: session in inconsistent state
170412077	iSM 7.0.7 (and before?) File Emit does not evaluate _sreg() value when setting "Append" property

IRN Number	Summary
170327016	How to pass a value from a BI Object to a WebFOCUS variable
170127001	Support STR-Transform for XML Digital Signature
161220053	iWaySDK 7.0.6 won't build due to error not encountered during build in iIT or 7.0.4
161206022	Cannot read and then delete a file in the same process flow using the Samba agent
160919086	RN#160919086 A Oracle SQL query that works in Oracle cannot be run by iSM SQL Object
160804006	IRN#160804006 Salesforce Adapter's persistence not working as expected
160723001	IRN#160723001 _iwexists - (anoy exist rtelated IFL) does not return true if sreg has blank value
160810059	IRN#160810059 iwayworkdir in console resolving to "base" path instead of iIA path
160720094	IRN#160720094 Error: Error doing runtime transform [xslt]: Document construction [string] failed
123623515	IRN#23623515 Force array on JSON objects
171114041	BAM 7.0.6 anomaly: La conversion d'un type de données varchar en type de données datetime
170829084	Hexadecimal to Text & Vice-versa
171116029	Encountering Invalid Iteration Semantics Error Termination of Process Flow

IRN Number	Summary
161221066	Specify SSL Key/Trust-store Alias for SOAP Server
170825068	Transforming from XML to HTML tables only first table gets column HDR definition
170206001	IRL:Testing IRN
170915021	Transform failing to work when using the word Provisionsempfänger in a constant value
170329021	iSM Decision Switch Routing Not Working
170331078	XML to JSON inconsistency handling digits as string

Known Issues and Considerations

This section describes known issues and considerations in iWay version 8.0.3.

Git Support in iWay Integration Tools

iWay Integration Tools (iIT) enables you to install and integrate the Git open source distributed version control system. Due to a bug in the Git plugin for Eclipse, after installing iIT, you must perform the following steps to enable integration with Git:

1. Close iWay Integration Tools (iIT).

2. Navigate to the location on your file system where iIT is installed. For example:

```
C:\iIT_803
```

3. Open the *configuration* subfolder, as shown in the following image.
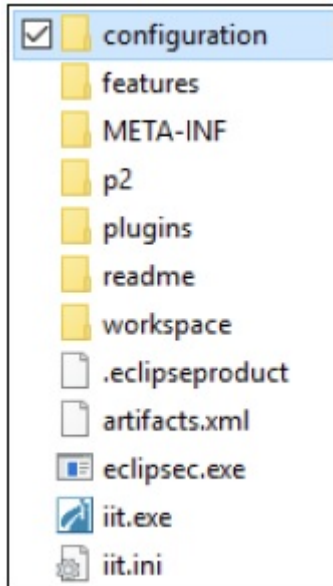
4. Open the *org.eclipse.equinox.simpleconfigurator* subfolder, as shown in the following image.
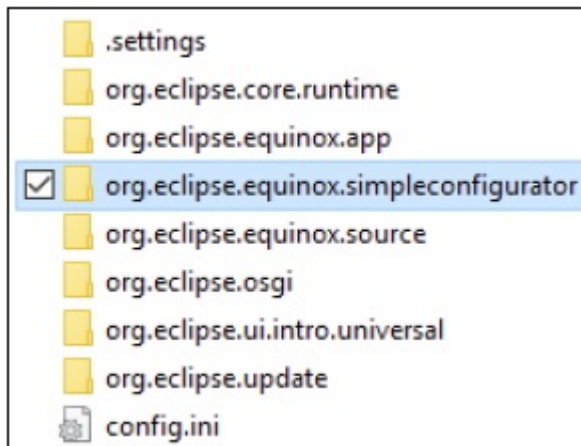
The *org.eclipse.equinox.simpleconfigurator* subfolder contains the *bundles.info* file, as shown in the following image.

5. Edit the *bundles.info* file using a text editor (for example, Notepad).

6. Search for the following line in the *bundles.info* file:

```
org.slf4j.api,1.7.2.v20121108-1250,plugins/
org.slf4j.api_1.7.2.v20121108-1250.jar,4,false
```

7. Delete this line.

8. Save the *bundles.info* file.

9. Open iIT.

10.Click the *Open Perspective* icon on the toolbar, as shown in the following image.
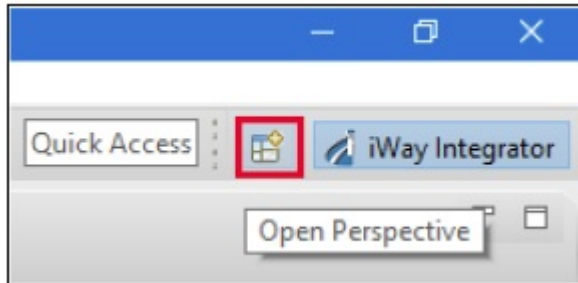
The Open Perspective dialog box opens, as shown in the following image.
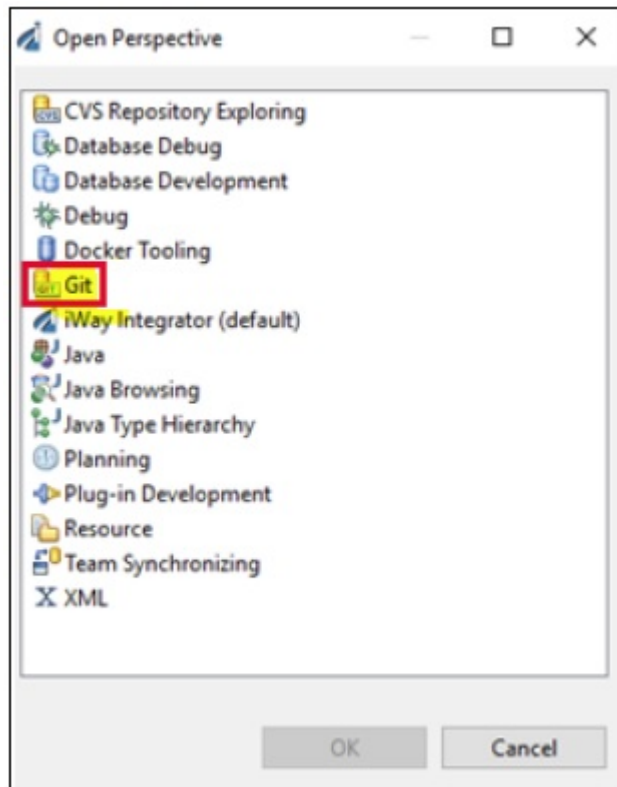
11.Select *Git* from the list of available perspectives, and then click *OK*.

You are returned to iIT, where the Git perspective is now implemented, from which you can select and work with your Git repositories, as shown in the following image.
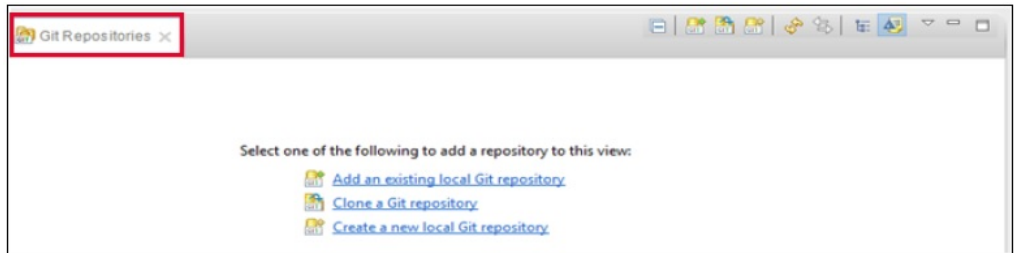
iWay Business Activity Monitor

iWay Business Activity Monitor (BAM) requires the creation of a new database. An existing iWay BAM database (created in iWay version 7.x) can be archived for future access through standard database utilities. There are known issues with the resubmit functionality of iWay BAM in iWay version 8.0, due to repackaging into the application structure. For more information or if you have any questions, contact iWay Customer Support.

Process Flow Test-Run (z/OS)

On z/OS platforms, a *test run* for a process flow from iWay Integration Tools (iIT) can be performed only against the local configuration or a remote configuration. The *test run* against a test server is not supported at this time.

Updating the iWay Configuration File Metadata

Metadata for the iWay configuration file, which contains definitions for generics/configurations, can be updated to the latest iWay version using the *Refresh* option. Doing so will bring in the options for newer components that are available in the latest iWay version. To update your metadata using iWay Integration Tools (iIT), expand the *Configurations* subfolder in your application project, right-click the iWay configuration file (*iway* node), and select *Refresh* from the context menu, as shown in the following image.
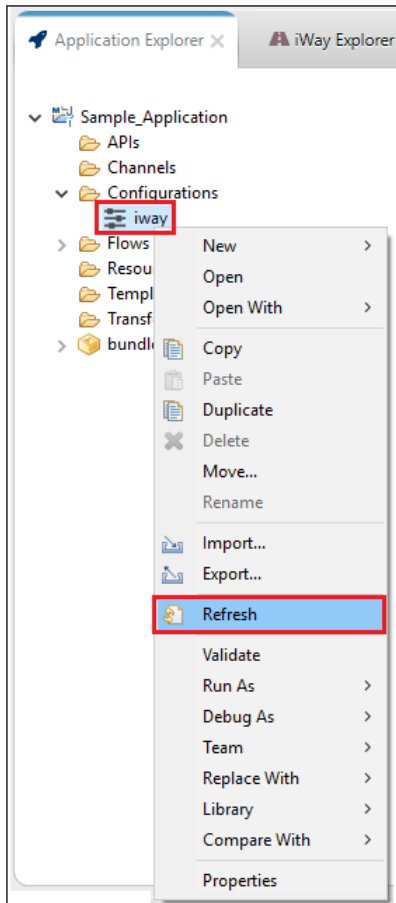
If you create a new configuration from within a process flow, then this step is not required. In this case, metadata for the iWay configuration file will be refreshed automatically for any components that are used.

WebFOCUS Support

Due to WebFOCUS security model changes, including internal API changes, you must disable the new WebFOCUS security model to enable existing iWay applications to run against WebFOCUS. This will be addressed in a future iWay release, where the new WebFOCUS security model will be supported.

❑ **iWay WF Object.**

   ❑ Fully supports WebFOCUS version 80xx with no additional configuration required.

   ❑ If you are using this object with WebFOCUS version 82xx, Application Folders are supported, but not Virtual folders.

❑ **ReportCaster Object.**

   ❑ Fully supports WebFOCUS version 80xx with no additional configuration required.

   ❑ If you are using this object with WebFOCUS version 82xx, you must uncheck the *Cross Site Request Forgery Protection* setting in the WebFOCUS Administration Console.

❑ **ETL Object.** Supports WebFOCUS version 80xx and version 82xx.

Key Features

This section provides a summary of key features available in iWay Service Manager (iSM) and iWay Integration Tools (iIT) in version 8.0.3. For more information, refer to the online documentation.

iWay 8 Reference KnowledgeBase

Visit the new iWay 8 Reference KnowledgeBase, which contains technical content for iWay Integration Tools (iIT), iWay Service Manager (iSM), and How-to's.

https://iwaykb.informationbuilders.com

The iWay 8 Reference KnowledgeBase supports your success with iIT, your application design-time environment and iSM, your application run-time environment.

You can search across the KnowledgeBase for iWay 8 reference topics and How-to's. Additional technical content will be published on an ongoing basis.

Converting Apache Avro Response Objects to XML or JSON Format

The Apache Avro File Read Service (com.ibi.agents.XDAvroFileReadAgent) includes the *Conversion Format* parameter, which can automatically create an XML-based or JSON-based structure for further data processing.
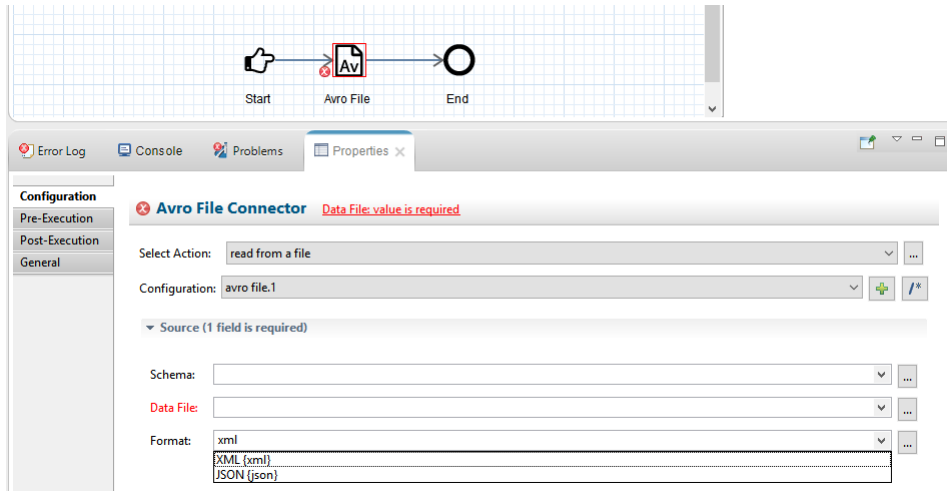
This service reads an Avro container in binary format and returns the objects it contains. The objects are converted to XML or JSON, depending on the configuration of the *Conversion Format* parameter. The Avro data can originate from an input document or a specific file.

Changing Your iWay Service Manager Administration Console Password

The Change Password option allows users to change their password while logged in to the iWay Service Manager Administration Console. This feature applies only to users currently logged in to the Console Security Realm (the default security realm) and does not apply to other security realms, such as LDAP. In the iWay Service Manager Administration Console, the Change Password option is located in the left pane of the Server page, under the Facilities group, as shown in the following image.

Selecting the Change Password option opens the Users pane where you can enter your current password and a new password, which must be confirmed, as shown in the following image.

Click *Finish* when you have completed making your changes.

Apache Kafka Connector

The Apache Kafka Connector enables real-time data exchanges between Apache Kafka and other applications, databases, and external business partner systems. When configuring a process flow in iIT, the Apache Kafka Connector can be selected from the Palette under the Big Data Connectors group, as shown in the following image.
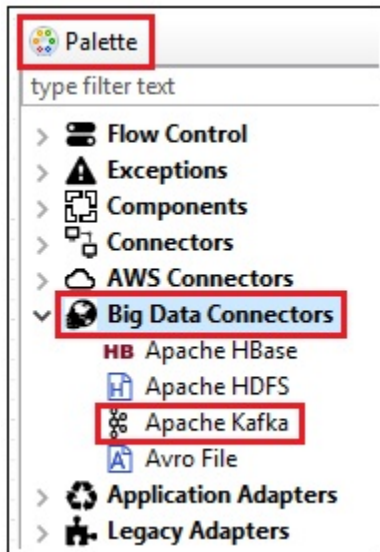
This connector enables external applications for inbound and outbound processing with Apache Kafka:

❏ **Service Connector (Outbound).** Applications use this capability when they need to send information to Apache Kafka.

❏ **Event Connector (Inbound).** Applications use this capability when they need to consume messages that are received from Apache Kafka or use Apache Kafka as an event processing system.

Message interactions through the connector can consist of the following types:

❏ Request

❏ Response

❏ Event Receive

Using the connector with iWay 8 events can consist of the following types:

❏ Event Trigger

❏ Event Data Serialization

Integration with Apache Kafka can be implemented without configuring complex property files of different types. XML and JSON documents from Apache Kafka can also be created without coding or learning special record or serialization rules.

Amazon DynamoDB Streams Listener

A DynamoDB stream is an ordered data flow containing information about changes to items in an Amazon DynamoDB table. When you enable a stream on a specific table, DynamoDB captures information about every modification to the items within that table.

Whenever an application creates, updates, or deletes items in a table, DynamoDB Streams writes records to the stream with the primary key attribute of the items that were modified. Each stream record contains information about a change to a single item in the DynamoDB table. The stream can be configured so that records capture additional information, such as images of the modified item before and after the modification. DynamoDB Streams guarantees that each stream record appears exactly once in the stream and that records appear in the stream in the same sequence as the actual modifications to the data items. The DynamoDB Streams listener uses the DynamoDB Streams Kinesis Adapter and the Kinesis Client Library (KCL) to consume a stream. The required third-party libraries are automatically installed with the DynamoDB Connector. No additional installation steps are required.

When the DynamoDB Streams listener starts, it instantiates a Kinesis worker, which creates record processors to handle incoming records from the stream. Each record processor is associated with one or more shards of the stream. Batches of records from a single shard are dispatched to a record processor. For each batch, the record processor uses a single iWay Service Manager (iSM) worker to process records consecutively, preserving the order within the batch. The record processor uses *checkpoints* by saving the sequence numbers of records that have been processed. The frequency of these checkpoints can be configured as a property of the DynamoDB Streams listener.

When using the Channel Builder in iIT to configure a channel, you can select the DynamoDB Streams listener from the Listener Component Type dialog box, as shown in the following image.
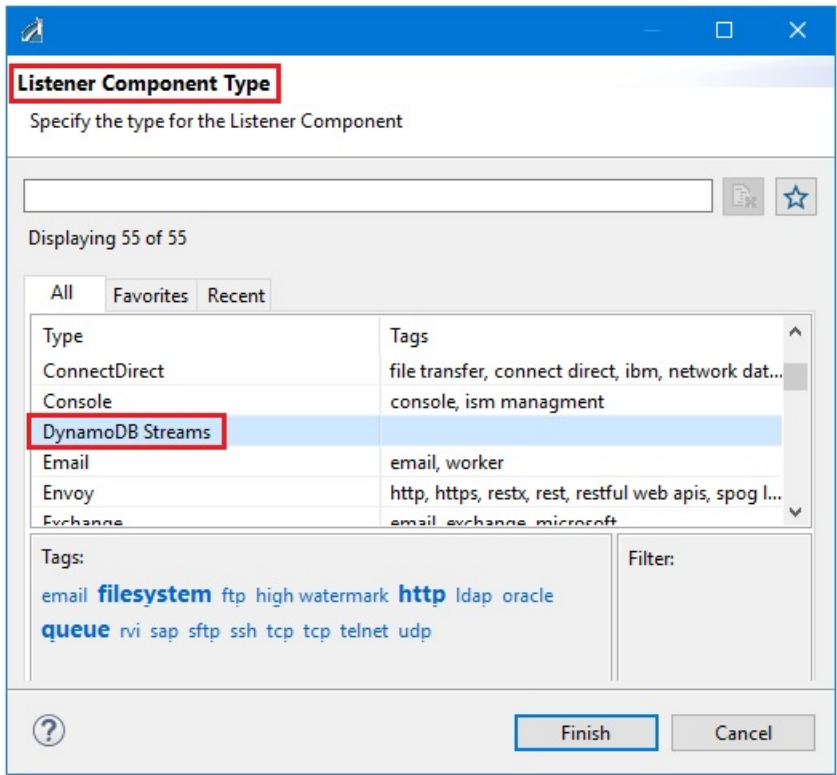
Note: A stream must be enabled for a table before it can be accessed by a listener. The listener does not enable the stream automatically.

JSON Validation Against a Schema

The Check Document Against External Schema Service (com.ibi.agents.XDCheckSchema) has been updated to support JSON-based validation against a JSON schema in addition to prior XML validation against an XML schema. This enables the application to validate the JSON format of a given document prior to passing it for further processing, which ensures that only valid data is being processed and any data format issues can be flagged earlier in the processing cycle. The new configuration options are available in the Check Schema Service (com.ibi.agents.XDCheckSchema).

Docker and Cloud Support

To use Docker-based deployment, ensure that you review the updated license agreement during the iWay Release 8.0.3 installation. You may also review the license post-installation to ensure that your deployment adheres to the Docker-based licensing. For further information or clarification for Docker-based licensing, contact iWay Customer Support.

Packaging an iWay application into a Docker image is now supported, which enables streamlined deployments into a cloud environment of your choice. When an iWay application is created in iIT, you can select an option to enable Docker, as shown in the following image.
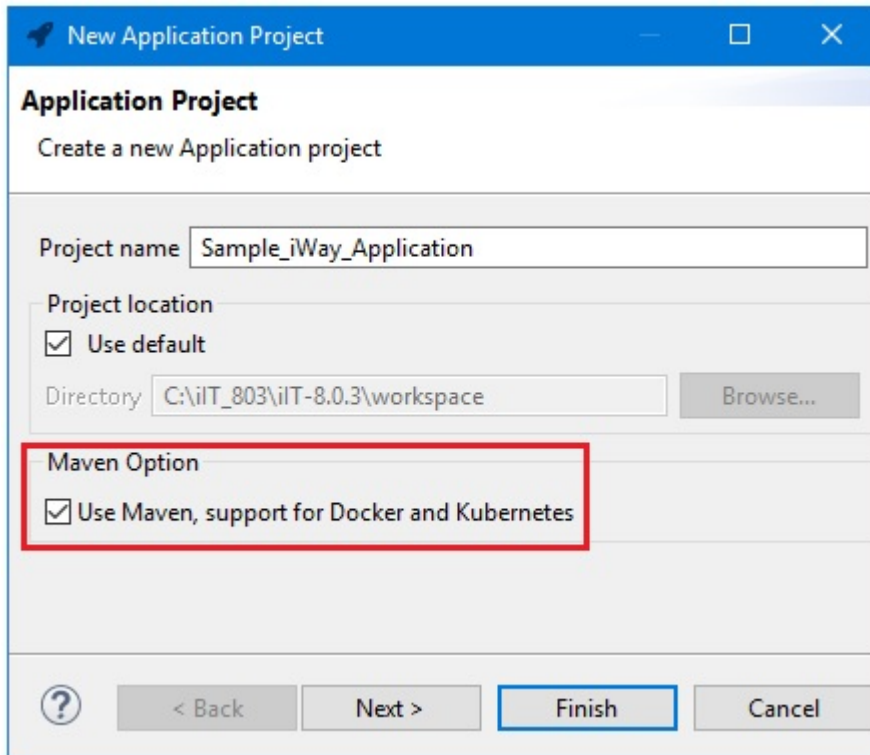

Selecting this option will create all of the necessary structures, such as a Docker file and a project object model (POM) file.

The application image can easily be created using the Maven plug-in within iWay Integration Tools (iIT). The Docker Explorer in iIT can be used to monitor and manage your Docker instances. Full support for Kubernetes enables you to take a Docker image and easily deploy it into Docker, or cloud-based environment.

Slack Connector

The Slack Connector enables an iWay application to integrate and communicate with Slack during data processing. When configuring a process flow in iIT, the Slack Connector can be selected from the Palette under the Connectors group, as shown in the following image.
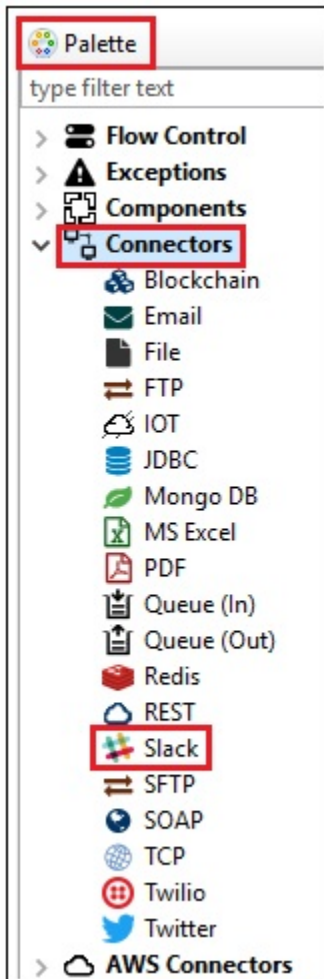

This connector allows you to perform standard actions, such as subscribing to a specific Slack channel, posting messages, and many others. This allows you to send live feeds from a Slack system to a specific user or a group of users. This proactive real-time notification can be used as part of system operations or business operations.

Amazon S3 Listener

The Amazon S3 listener polls the Amazon Simple Storage Service and accepts objects based on their key. This listener can store the contents of the object in a document or generate a small signal document with the information from the object summary. After processing, the object is deleted. Optionally, the object can be copied to a removal destination before it is deleted.

When using the Channel Builder in iIT to configure a channel, you can select the Amazon S3 listener from the Listener Component Type dialog box, as shown in the following image.
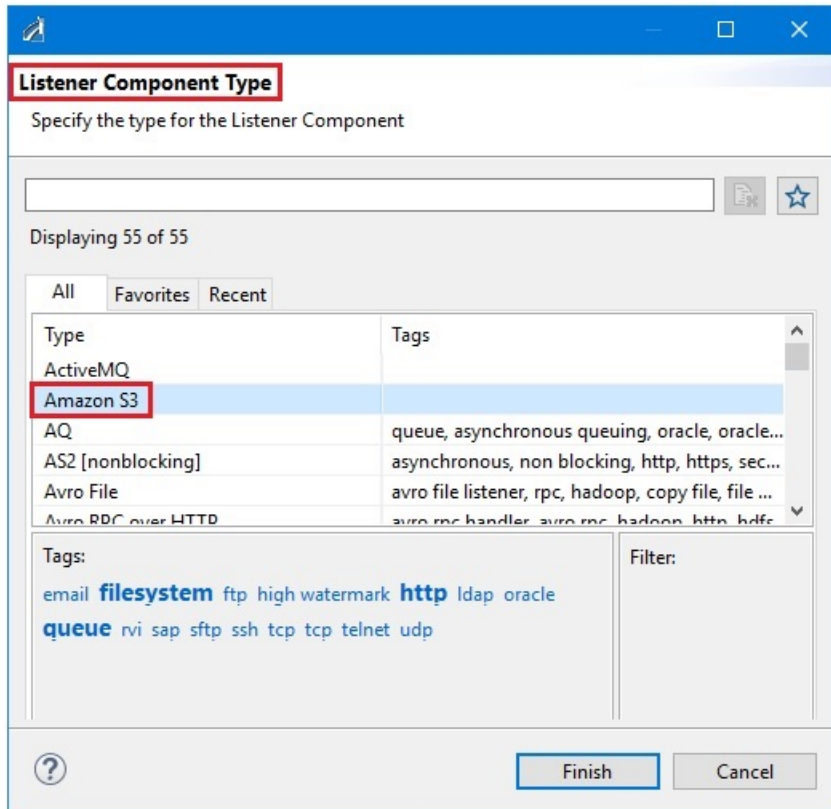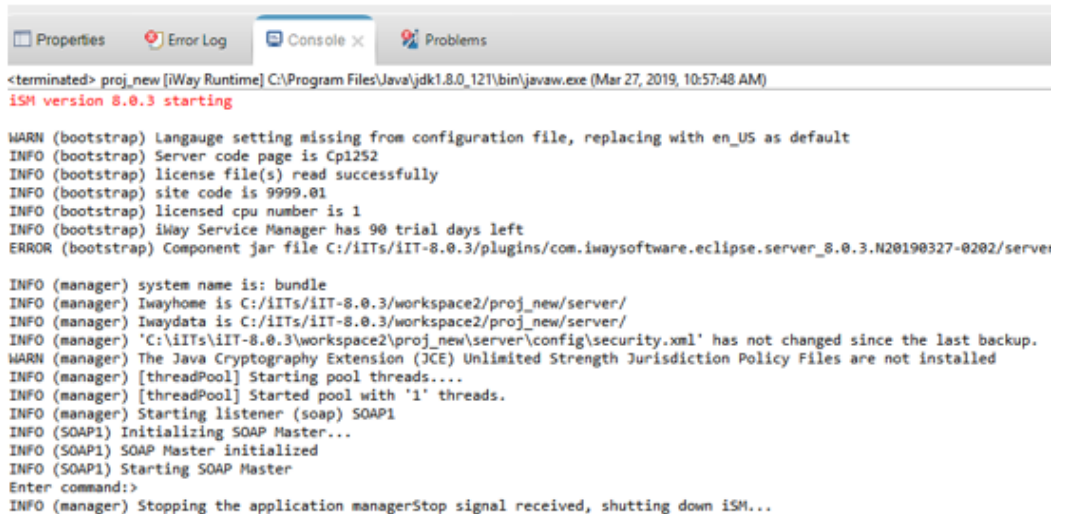
Embedded Runtime

As of iWay Version 8.0.3, embedded iSM runtime is available in iIT. This enables the expedited development and testing of the application components without requiring an external iSM installation. For instance, when testing the process flows, you are now given the option to either test the pflow (which means test it locally) or test Remote, as shown in the following image.
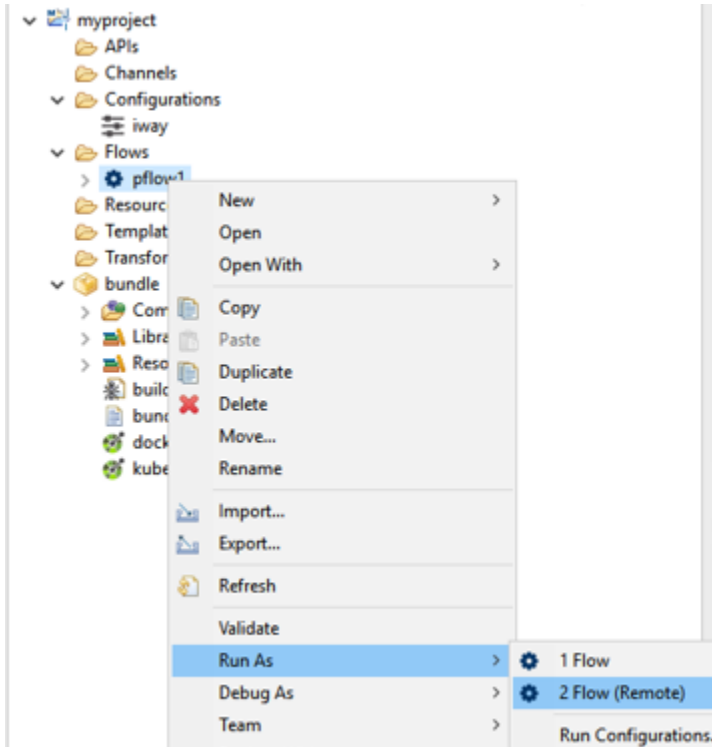
❑ **Local (default).** When the Remote option is *not* selected, the process flow will be tested using embedded runtime. You have an option to select which iSM runtime to use. The application is used to create a local runtime environment and is started in the Console. The process flow is executed against this local runtime and the results are returned to you. The runtime is shut down automatically. You are not required to have a separate iSM installation for this.

❑ **Remote.** You will need to provide the location of the running iSM instance where the application will be deployed as a test server. If not, the provided configuration will be used to execute the process flow.

The following image of the Console shows the process of starting a local environment, the execution of the test component, and the final shut down of the local environment.

```
  Properties      Error Log      Console ×      Problems

<terminated> proj_new [iWay Runtime] C:\Program Files\Java\jdk1.8.0_121\bin\javaw.exe (Mar 27, 2019, 10:57:48 AM)
iSM version 8.0.3 starting

WARN  (bootstrap) Langauge setting missing from configuration file, replacing with en_US as default
INFO  (bootstrap) Server code page is Cp1252
INFO  (bootstrap) license file(s) read successfully
INFO  (bootstrap) site code is 9999.01
INFO  (bootstrap) licensed cpu number is 1
INFO  (bootstrap) iWay Service Manager has 90 trial days left
ERROR (bootstrap) Component jar file C:/iITs/iIT-8.0.3/plugins/com.iwaysoftware.eclipse.server_8.0.3.N20190327-0202/server

INFO  (manager) system name is: bundle
INFO  (manager) Iwayhome is C:/iITs/iIT-8.0.3/workspace2/proj_new/server/
INFO  (manager) Iwaydata is C:/iITs/iIT-8.0.3/workspace2/proj_new/server/
INFO  (manager) 'C:\iITs\iIT-8.0.3\workspace2\proj_new\server\config\security.xml' has not changed since the last backup.
WARN  (manager) The Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files are not installed
INFO  (manager) [threadPool] Starting pool threads....
INFO  (manager) [threadPool] Started pool with '1' threads.
INFO  (manager) Starting listener (soap) SOAP1
INFO  (SOAP1) Initializing SOAP Master...
INFO  (SOAP1) SOAP Master initialized
INFO  (SOAP1) Starting SOAP Master
Enter command:>
INFO  (manager) Stopping the application managerStop signal received, shutting down iSM...
```

iWay runtimes can be managed in the Configurations area, as shown in the following image. You can create multiple runtime environment definitions for different application projects and templates to be used for local test purposes.
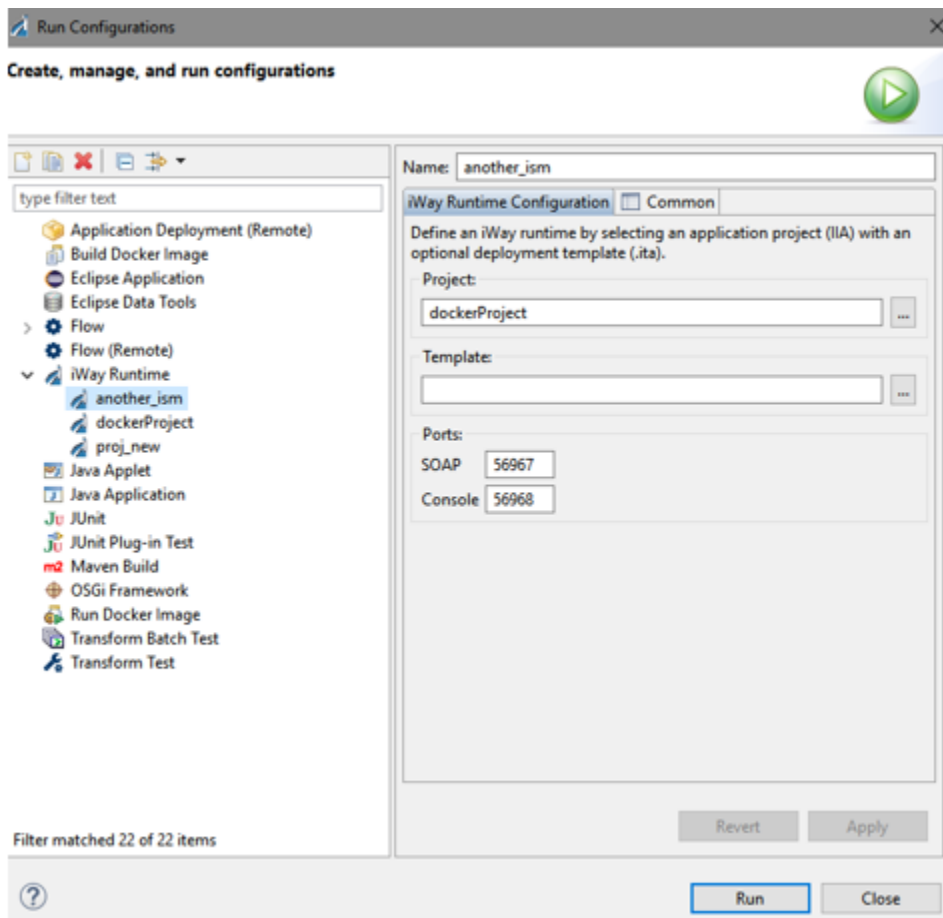
Customer Support

Do you have questions about iWay version 8.0.3?

Join the Focal Point community. Focal Point is our online developer center and more than a message board. It is an interactive network of more than 3,000 developers from almost every profession and industry, collaborating on solutions and sharing tips and techniques, *http://forums.informationbuilders.com/eve/forums*.

You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through *https://techsupport.informationbuilders.com*. You can connect to the tracking system and known-problem database at the Information Builders support center. Registered users can open, update, and view the status of cases in the tracking system and read descriptions of reported software issues. New users can register immediately for this service. The technical support section also provides usage techniques, diagnostic tips, and answers to frequently asked questions.

Call Information Builders Customer Support Services (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00A.M. and 8:00P.M. EST to address all your questions. Information Builders consultants can also give you general guidance regarding product capabilities and documentation. Be prepared to provide your six-digit site code (*xxxx.xx*) when you call.

Feedback

Customer success is our top priority. Connect with us today!

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To send us feedback or make a connection, contact Sarah Buccellato, Technical Editor, Technical Content Management at *Sarah_Buccellato@ibi.com.*

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iWay

iWay Release Notes

Version 8.0.3 Service Manager (SM)