InfoSphere Information Server
Version 9 Release 1

IBM InfoSphere Information Server
ILOG JRules Message Reference

IBM
Note

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IBM WebSphere ILOG JRules messages

All the IBM WebSphere ILOG JRules messages are listed by the alphanumeric order of the message IDs, and can be searched for by the message IDs.

You must be familiar with the functions of the operating system where the IBM WebSphere ILOG JRules connector is installed. You can use the information in this message reference to identify an error or warning and resolve the problem by using the appropriate recovery action. You can also use this information to understand where the messages are generated and logged.

Each message has a message identifier that consists of a prefix (IIS) and a message number. Messages are listed in numeric sequence based upon the message number. There are three message types: Error, Warning, and Informational. Message identifiers ending with an E are error messages. Those ending with a W indicate warning. Messages ending in an I indicates informational messages.

IIS-CONN-JRULES-00001E  The connector encountered a record with the error: reject condition on the input link at index link index, and a reject link with that reject condition was not associated with the input link. The input link indexes are zero-based.

**Explanation:** The connector could not process a record on the specified input link because the record had an error. The connector could not reject this record and continue running because the reject link is not defined for the input link. The connector stopped processing data, and the job failed.

**User response:** Complete one of the following steps:
- To prevent the error, correct the input data.
- Define a reject link for the specified input link. Then, enable a reject condition for the specified error so that records with the error are sent to the reject link.

IIS-CONN-JRULES-00002E  The connector encountered an error while invoking JRules. The reported error is: error text.

**Explanation:** A call that the connector made to IBM WebSphere ILOG JRules resulted in an error.

**User response:** Investigate the issues that are indicated by the error text. Ensure that the IBM WebSphere ILOG JRules environment, including the class path setting, is configured correctly. For more information, see the IBM WebSphere ILOG JRules documentation.

IIS-CONN-JRULES-00003E  The connector was configured for Dynamic XOM and it encountered columns first column and second column that can both be used for the XML data.

**Explanation:** When the connector is configured to use the Dynamic Execution Object Model (XOM), the values for IBM WebSphere ILOG JRules rule set parameters are XML instances. Each link that corresponds to an IBM WebSphere ILOG JRules rule set parameter must have a single column that contains the XML instance value for the parameter for that link. However, the connector found two columns that are eligible to contain the XML instance value.

**User response:** Ensure that the link contains a single column that has a character data type, such as VarChar. If multiple text columns are defined, ensure that the IBM WebSphere ILOG JRules expression CC_JRules(); is specified in the Description attribute for only one of the columns on the link. When only one column has the expression, the connector uses that column to hold XML instances for rule set parameter values. For more information about Dynamic XOM, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00004E  The connector was configured to propagate unmatched fields with the matching based on the order of records, and the number of records consumed on the input link input link index does not match the number of records produced on the corresponding output link output link index.

**Explanation:** The connector was configured to propagate unmatched fields based on the order of
records. In this case, the number of records in the input link in each rule execution cycle must match the number of records that are produced on the output link where the unmatched fields are propagated. However, the number of records on the specified input link does not match the number of records on the corresponding output link.

User response: Complete one of the following tasks:

- Ensure that the number of records that are generated on the output link matches the number of records on the input link from which the unmatched fields are propagated.
- Disable unmatched field propagation for the stage.
- Configure the stage to use a propagation strategy that is not based on the number of records.

IIS-CONN-JRULES-00005E  The connector was configured to propagate unmatched fields with the matching based on input and output Java object identifiers, and the output Java object identifier does not match the identifier of any Java object on input.

Explanation: The connector was configured to propagate unmatched fields based on the Java object identifiers. The connector received a Java object from IBM WebSphere ILOG JRules. When the connector processed the Java object to populate fields of the record on the corresponding output link, the connector determined that the object does not match any of the Java objects that were created from the input link field values and passed to IBM WebSphere ILOG JRules in the same rule execution cycle. As a result, the connector cannot propagate the unmatched field values to the output link that is associated with the Java object.

User response: Complete one of the following tasks:

- Ensure that the identity of the Java object that was created for the input link for which unmatched field propagation is needed is preserved as the object is processed by the IBM WebSphere ILOG JRules rule set. Typically, the rule set parameter must be defined as an input/output rule set parameter.
- Disable unmatched field propagation for the stage.
- Configure the stage to use a propagation strategy that is not based on Java object identifiers.

IIS-CONN-JRULES-00006E  The connector was configured to propagate unmatched fields with the matching based on key values in records, and the column column name was included in the field propagation key while at the same time this column is an unmatched column eligible for propagation. This combination is not supported.

Explanation: The connector was configured to propagate unmatched fields based on the values of columns that are designated as propagation key columns. The specified column was designated as a propagation key column, but it is also an unmatched column that can be propagated. A column that is designated as a propagation key column cannot be an unmatched column.

User response: Complete one of the following steps:

- Ensure that the specified column is not both a propagation key column and eligible for unmatched field propagation.
- Disable unmatched field propagation for the stage.
- Configure the stage to use a propagation strategy that is not based on the key values in records.

IIS-CONN-JRULES-00008E  The connector encountered an error while trying to establish JRules session. The reported error is: error text.

Explanation: Before the connector invokes the rule set, the connector must start an IBM WebSphere ILOG JRules session. The connector could not establish the session.

User response: The action depends on the error. If the error is at the operating system level or IBM WebSphere ILOG JRules product level, consult the relevant documentation for more details and information about how to resolve the error.
IIS-CONN-JRULES-00009E  The connector encountered an unsupported data type code: data type.

Explanation: The specified data type is not supported by the connector. The invalid data type can be an InfoSphere DataStage type of a column on the link or a Java type that is used by a method of the rule set parameter class.

User response: Replace the invalid data type with a data type that is supported. For more information about InfoSphere DataStage and Java data types, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00010W  The connector encountered an internal error. The argument argument name has the NULL value.

Explanation: A method in the connector code received an argument with the NULL value, and the NULL value was not valid in the given context.

User response: This message indicates an internal error that might cause errors later in the job. Recompile the job and try again. If the problem persists, collect the job logs and contact IBM Software Support.

IIS-CONN-JRULES-00011E  The output parameter parameter name was returned by JRules and this output parameter was not specified for any of the output links.

Explanation: After the connector invoked the rule set, the connector received the specified output parameter from IBM WebSphere ILOG JRules. However, this parameter is not associated with any of the output links for the stage.

User response: Ensure that each output and input/output parameter of the rule set is associated with one output link of the stage that is not a reject link.

IIS-CONN-JRULES-00012E  The ruleset parameter class was not specified for the input link at index link index. A valid fully-qualified class name must be specified. The input link indexes are zero-based.

Explanation: When the Execution Object Model (XOM) type for the stage is set to Java XOM, the rule set parameter class name must be specified for each input link of the stage. A rule set parameter class name is not specified for the input link at the specified index.

User response: Ensure that a rule set parameter class is specified for all input links of the stage.

IIS-CONN-JRULES-00013E  The ruleset parameter class was not specified for the output link at index link index. A valid fully-qualified class name must be specified. The output link indexes are zero-based.

Explanation: When the Execution Object Model (XOM) type for the stage is set to Java XOM, the rule set parameter class name must be specified for each output link of the stage that is not a reject link. A rule set parameter class name is not specified for the output link at the specified index.

User response: Ensure that a rule set parameter class is specified for all output links of the stage that are not reject links.

IIS-CONN-JRULES-00014E  The ruleset parameter name was not specified for the input link at index link index. A valid parameter name must be specified. The input link indexes are zero-based.

Explanation: Each input link of the stage must be associated with a rule set parameter name. A rule set parameter name is not specified for the input link at the specified index.

User response: Ensure that a rule set parameter name is specified for all input links of the stage.

IIS-CONN-JRULES-00016E  The connector attempted to assign NULL value to the column column name and this column does not accept NULL values.

Explanation: The connector populated fields in the output record based on the output rule set parameter. For the specified column, the connector tried to set the field value to NULL, but the column does not accept NULL values. This situation can occur when the rule set parameter or the rule set parameter attribute has a NULL value and it maps to a column on the output link that does not accept NULL values.

User response: If you do not expect IBM WebSphere ILOG JRules to produce a NULL value, inspect the rule definition and the mapping between output link columns and output rule set parameters. If the NULL value is valid and expected, ensure that the specified column is configured to accept NULL values on the link by setting the Nullable attribute for the column to Yes.

IIS-CONN-JRULES-00017E  The connector encountered invalid batch size: batch size.

Explanation: The specified batch size value is not valid. The batch size must be zero or a positive integer with the maximum value of 999999999.
User response: Ensure that a valid batch size is specified. If a job parameter is used for the batch size property, ensure that a valid value for this parameter is provided when the job is run.

IIS-CONN-JRULES-00018E The connector encountered zero batch size but the key processing is enabled and the ruleset contains non-array parameters. The batch size must be greater than zero in this case.

Explanation: When key mode is enabled for the stage and the batch size is set to 0, the connector reads records from the master link until the key value changes. The connector then reads records from the secondary links and reads records that have key field values that match the key field value of the records from the master link. In this scenario, all rule set parameters that are associated with input links must be based on Java array types. Therefore, all the input links must be associated with array parameters. However, the rule set parameter for one or more input links is based on a nonarray Java type.

User response: Complete one of the following tasks:
- Ensure that the Java classes of all rule set parameters that are associated with input links are based on Java array types.
- Configure the stage to run in batch mode or in key mode with a batch size that is greater than zero.

For more information about batch and key modes of operation, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00019E The ruleset location value is required but it was not specified.

Explanation: The location of the rule set was not specified for the stage.

User response: Ensure that the location of the rule set is specified. When the Engine mode property is set to Core engine, the rule set location must be a fully qualified path to the rule set archive file. When the Engine mode property is set to J2SE RES XU or J2EE RES XU, the rule set location must be the IBM WebSphere ILOG JRules path to the rule set in the rule set repository.

IIS-CONN-JRULES-00020E The connector could not load XOM class class name for the input link at index link index. The input link indexes are zero-based. The reported error is: error text.

Explanation: When the XOM type property is set to Java XOM, the connector must be able to load Java classes for rule set parameters that are associated with all input links. The connector could not load the class name Java class for the input link at the specified index.

User response: Ensure that the specified Java class is in the class path that is specified for the stage. The .jar file with the class definition or the directory with the class file must be included in the class path value.

IIS-CONN-JRULES-00021E The connector could not load XOM class class name for the output link at index link index. The output link indexes are zero-based. The reported error is: error text.

Explanation: When the XOM type property is set to Java XOM, the connector must be able to load Java classes for rule set parameters that are associated with all output links that are not reject links. The connector could not load the class name Java class for the output link at the specified index.

User response: Ensure that the specified Java class is present in the class path that is specified for the stage. The .jar file with the class definition or the directory with the class file must be included in the class path. If the error is at the operating system level or IBM WebSphere ILOG JRules product level, consult the relevant documentation for more details and suggestions about how to resolve the error.

IIS-CONN-JRULES-00022E The connector encountered a malformed column description: description text. The expression expression expression text does not start with CC_JRULES.

Explanation: The Description attribute value for a column on one of the links of the stage included a CC_JRules expression that is not formatted correctly. The Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expression must start with the literal CC_JRules, which is not case sensitive. The specified column description did not include the CC_JRules prefix.

User response: Correct the Description attribute value for the column to include CC_JRules expressions in the correct format. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00023E The connector encountered a malformed column description: description text. The expression expression expression text does not have an opening parenthesis ( after CC_JRULES.

Explanation: The Description attribute value for a column on one of the links of the stage included a
CC_JRules expression that is not formatted correctly. The Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expression must start with the literal CC_JRules, which is not case sensitive, followed by an opening parenthesis. The specified column description did not include the opening parenthesis.

User response: Correct the Description attribute value for the column to include CC_JRules expressions in the correct format. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00024E The connector encountered a malformed column
description: description text. The expression expression text does not have a closing parenthesis ) at the end.

Explanation: The Description attribute value for a column on one of the links of the stage included a CC_JRules expression that is not formatted correctly: expression text. The Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expression must end with a closing parenthesis. The specified column description did not include the closing parenthesis.

User response: Correct the Description attribute value for the column to include CC_JRules expressions in the correct format. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00025E The connector encountered a malformed column
description: description text. The description has the trailing text: trailing text after CC_JRULES().

Explanation: The Description attribute value for a column on one of the links of the stage included a CC_JRules expression that is not formatted correctly. The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expression must end with a closing parenthesis. The specified column description contained trailing text after the closing parenthesis of a CC_JRules expression.

User response: Correct the Description attribute value for the column to include CC_JRules expressions in the correct format. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00026E The connector encountered a malformed column
description: description text. The expression expression text should be in format: CC_JRULES(method_name,index).

Explanation: The Description attribute value for a column on one of the input links of the stage included a CC_JRules expression that is not formatted correctly. The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expressions for the input link must be in the format CC_JRules(method_name,index) where method_name is the name of the rule set parameter class method and index is the method argument index, starting with 1 for the first argument. The specified column description does not meet this requirement.

User response: Correct the Description attribute value for the column to include CC_JRules expressions in the correct format. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00027E The connector encountered a malformed column
description: description text. The expression expression text should be in format: CC_JRULES(method_name).

Explanation: The Description attribute value for a column on one of the output links of the stage included a CC_JRules expression that is not formatted correctly. The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expressions for the output link must be in the format CC_JRules(method_name) where method_name is the name of the rule set parameter class method. The specified column description does not meet this requirement.

User response: Correct the Description attribute value for the column to include CC_JRules expressions in the correct format CC_JRules(method_name). For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

Message reference: IBM WebSphere ILOG JRules connector
The connector encountered a malformed column

**Explanation:** The Description attribute value for a column on one of the output links of the stage included a CC_JRules expression that is not formatted correctly. The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expressions for the input link must be in the format CC_JRules(method_name,index), and the expressions for the output link must be in the format CC_JRules(method_name), where method_name is the name of the rule set parameter class method and index is the method argument index, starting with 1 for the first argument. The specified expression does not contain the method_name.

**User response:** Correct the Description attribute value for the column to include CC_JRules expressions in the format CC_JRules(method_name,index) for input links or CC_JRules(method_name) for output links. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

The connector encountered a malformed column

**Explanation:** The Description attribute value for a column on one of the output links of the stage included a CC_JRules expression that is not formatted correctly. The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expressions for the input link must be in the format CC_JRules(method_name,index) where method_name is the name of the rule set parameter class method and index is the method argument index, starting with 1 for the first argument. The specified expression does not contain the index.

**User response:** Correct the Description attribute value for the column to include CC_JRules expressions in the format CC_JRules(method_name,index). For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.
The connector encountered a malformed column description: description text. The description for the output column should be in format: CC_JRULES(method_name);. The specified description contains multiple method names for the same column.

**Explanation:** The Description attribute value for a column on one of the output links of the stage included a CC_JRules expression that is not formatted correctly. The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The expressions for the output link must be in the format CC_JRules(method_name) where method_name is the name of the rule set parameter class method. Only one class method can be specified, but the specified description contains an expression with multiple values for the class method.

**User response:** Correct the Description attribute value for the column to include CC_JRules expressions in the format CC_JRules(method_name). For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

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The connector encountered an error while invoking the method: method name. on the object of Java XOM class: class name. The reported error is: error text.

**Explanation:** The connector could not invoke the method name. method on the Java object of the class name. class.

**User response:** Complete the following steps:

- Ensure that the method name. method is defined in the class name. class.
- Ensure that the method name. method is a public method.
- Ensure that the input link columns that correspond to the method name. method arguments and output link columns that correspond to the return value for the method name. method are defined correctly.

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The method name: method name specified in the column description was not found in the XOM class: class name.

**Explanation:** The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The method name that is specified in the CC_JRules expression in the Description attribute of one of the columns was not found in the Java class that is associated with the link for that column.

**User response:** Ensure that the method name in the CC_JRules expression in the Description column attribute is defined in the Java class that is specified for the link for that column.

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The connector encountered errors from JRules while parsing the ruleset archive: archive name. The reported errors are: error text.

**Explanation:** IBM WebSphere ILOG JRules could not parse the specified rule set archive.

**User response:** If the error is at the operating system level or IBM WebSphere ILOG JRules product level, consult the documentation for more details and suggestions about how to resolve the error.

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The column description does not have the definition for parameter at index: parameter index for method: method name in XOM class: class name.

**Explanation:** The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The connector could not find the required CC_JRules expression for the parameter at the parameter index index in the method name method of the class name rule set parameter Java class. As a result, the connector could not prepare the value to use for this method parameter when the method is invoked.

**User response:** Ensure that the CC_JRules expression is defined for a column that is used to construct the value for the method parameter that is indicated in the message. For more information about the format, see the connector documentation in the InfoSphere Information Server Information Center.

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The data type of the column: column name on input does not match the data type of the field with the same name defined in the XOM object.

**Explanation:** The connector tried to match the columns on the input link with the parameters of the rule set parameter class methods that have the same names in the rule set parameter class. The specified column on the input link maps to a parameter of a method with the same name, but their data types are not compatible.
User response: Ensure that the data type of the column and the data type in the rule set parameter class method are compatible. For more information about data type mapping, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00038E The data type of the column: column name on output does not match the data type of the field with the same name defined in the XOM object.

Explanation: The connector tried to match the columns on the output link with the return values of the methods that have the same names in the rule set parameter class. The specified column on the output link maps to a return value of a method with the same name in the rule set parameter class that is associated with that link, but their data types are not compatible.

User response: Ensure that the data type of the column and the return value type in the rule set parameter class method are compatible. For more information about data type mapping, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00039E The method name: column name was detected in the column description as well as in the output XOM class, but the return type of the method defined in the XOM class is not compatible with the data type of the corresponding column on the output link.

Explanation: The column Description attribute values are used to specify the mapping between the IBM WebSphere ILOG JRules rule set parameter method and the link columns. Each Description attribute value includes one or more CC_JRules expressions separated by semicolons. The connector detected the specified method name in a CC_JRules expression in the Description attribute of a column on the input link and in the input rule set parameter class, and the number of parameters is the same in both places. However, the data types of the parameters that are expected by the method are not compatible with the data types of the corresponding columns on the input link.

User response: Ensure that the data types of the columns and the argument types in the rule set parameter class method are compatible. For more information about data type mapping, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00040E The key processing was enabled for the stage but no columns were selected for the key. At least one column must be selected. The selected columns must be defined on all input links.

Explanation: When the connector is configured to operate in key mode, one or more columns must be selected as the key column, and the selected columns must be defined on all input links. The connector could not find any key columns.

User response: Select one or more columns to be key columns, or disable key mode for the stage.

IIS-CONN-JRULES-00041E The ruleset parameter is based on Java XOM, and two columns: first column name and second column name are both mapped to it. Only one column can be mapped to the same ruleset parameter.

Explanation: When the connector is configured with a rule set parameter of a primitive Java type, only one column can be mapped to the parameter. Two columns are mapped to the same rule set parameter for the link.

User response: Ensure that only one column is mapped to the rule set parameter for the link.
IIS-CONN-JRULES-00043E  The ruleset parameter is based on Java XOM and no columns are mapped to this parameter.

Explanation: When a connector link is configured for a rule set parameter of a primitive Java type, one column on the link must be mapped to the rule set parameter. No columns are mapped to the rule set parameter for the link.

User response: Ensure that a column is mapped to the rule set parameter for the link.

IIS-CONN-JRULES-00044E  The ruleset parameter is based on Java XOM and a column of the compatible ruleset parameter type that maps to this parameter was not found on the output link.

Explanation: When a connector link is configured for a rule set parameter of a primitive Java type, one or more output columns must be mapped to the rule set parameter. No columns with a data type that is compatible with the rule set parameter type were found on the output link.

User response: Ensure that a column of a data type that is compatible with the rule set parameter type is on the output link.

IIS-CONN-JRULES-00045E  The ruleset parameter is based on Java XOM and a column of the compatible ruleset parameter type that maps to this parameter was not found on the input link.

Explanation: When a connector link is configured for a rule set parameter of a primitive Java type, one input column must be mapped to the rule set parameter. No columns with a data type that is compatible with the rule set parameter type were found on the input link.

User response: Ensure that a column of a data type that is compatible with the rule set parameter type is on the input link.

IIS-CONN-JRULES-00046E  The connector encountered unsupported ruleset parameter data type: class name.

Explanation: A data type that is specified for a rule set parameter is not supported.

User response: Specify a supported data type for the rule set parameter. For more information about the data types that are supported, see the connector documentation in the InfoSphere Information Server Information Center.

IIS-CONN-JRULES-00047E  Two output columns: first column name and second column name map to the same ruleset parameter. Exactly one column must be mapped to the ruleset parameter.

Explanation: When a connector output link is configured for a rule set parameter of a primitive Java type, the connector maps output link columns to parameters by data type. Two or more columns, including first column name and second column name, have a data type that matches the rule set parameter. Only one column can have the data type that matches the rule set parameter.

User response: Ensure that only one column has a data type that matches the rule set parameter.

IIS-CONN-JRULES-00048E  Two input columns: first column name and second column name map to the same ruleset parameter. Exactly one column must be mapped to the ruleset parameter.

Explanation: When a connector input link is configured for a rule set parameter of a primitive Java type, the connector maps output link columns to parameters by data type. Two or more columns, including first column name and second column name, have a data type that matches the rule set parameter. Only one column can have the data type that matches the rule set parameter.

User response: Ensure that only one column has a data type that matches the rule set parameter.

IIS-CONN-JRULES-00049E  The connector was configured for Dynamic XOM but no columns were identified for the XML data. Please identify the column containing the XML document by specifying CC_JRules(); expression in the column description or by ensuring that exactly one column on the link has Char, VarChar, LongVarChar, NChar, NVarChar or LongNVarChar data type.

Explanation: When the connector is configured to use the Dynamic Execution Object Model (XOM), a column must be specified to use for the XML data that represents rule set parameter values. No columns of this type are specified.

User response: To ensure that the link contains a column for XML data for the rule set parameter, complete one of the following steps:

- Specify a CC_JRules(); expression in the Description attribute of the column.
- Define only one column on the link to have the Char, VarChar, LongVarChar, NChar, NVarChar or LongNVarChar data type.
IIS-CONN-JRULES-00050E The connector encountered a record with the error: reject condition on the input link at index link index, and a reject link associated with this input link does not have the reject condition reject condition selected. The input link indexes are zero-based.

Explanation: The connector could not process a record on the link index input link because of the specified error. The connector could not reject the record and continue to run because the specified error is not defined as a reject condition on the reject link that is associated with the input link. As a result, the job failed.

User response: Complete one or more of the following steps:

- Correct the input data to prevent the specified error.
- Ensure that the reject link is associated with the specified input link and that the specified error is defined as a reject condition so that records with the error are sent to the reject link.

IIS-CONN-JRULES-00051E The connector encountered a duplicate field propagation key value: value for the column: column name on the input link at offset: link index during the rule execution cycle. The field propagation key value must be unique within the rule execution cycle. The input link indexes are zero-based.

Explanation: When the connector is configured to propagate unmatched fields based on the values of propagation key columns, the field propagation key values must be unique in each rule execution cycle. While the connector processed records on the specified input link, the connector detected two records with a duplicate field propagation key value.

User response: Ensure that the field propagation key values are unique for all records in a rule execution cycle.

IIS-CONN-JRULES-00052E The connector encountered invalid XOM type: xom type.

Explanation: The specified execution object model (XOM) type was not recognized by the connector.

User response: Complete the following steps:

1. Ensure that the XOM type that is specified for the stage is supported. The value for this property can be specified at design time or at run time with a job parameter. For more information about XOM types, see the connector documentation in the InfoSphere Information Server Information Center.
2. Recompile the job, and run the job again.
3. If the problem persists, collect the job logs and contact IBM Software Support.

IIS-CONN-JRULES-00053E The ILOG JRules connector has been configured as a target stage. This configuration is not supported by the connector.

Explanation: Only input links were defined for the stage. The stage must have both input and output links.

User response: Complete the following steps:

1. Ensure that the stage has both input and output links.
2. Compile the job, and then run it again.
3. If the problem persists, collect the job logs and contact IBM Software Support.

IIS-CONN-JRULES-00054E The ILOG JRules connector has been configured as a source stage. This configuration is not supported by the connector.

Explanation: Only output links were defined for the stage. The stage must have both input and output links.

User response: Complete the following steps:

1. Ensure that the stage has both input and output links.
2. Compile the job, and then run it again.
3. If the problem persists, collect the job logs and contact IBM Software Support.

IIS-CONN-JRULES-00055E The ILOG JRules connector has been configured as a target stage. This configuration is not supported by the connector.

Explanation: Only input links were defined for the stage. The stage must have both input and output links.

User response: Complete the following steps:

1. Ensure that the stage has both input and output links.
2. Compile the job, and then run it again.
3. If the problem persists, collect the job logs and contact IBM Software Support.
IIS-CONN-JRULES-00056E  Field propagation has been enabled using Java object id based mapping. However, none of the output links have a ruleset parameter Java class which maps to any of input link ruleset parameter.

Explanation: When the connector is configured to propagate unmatched fields based on Java object identifiers, one or more output links must have a rule set parameter of a Java type that is compatible with the Java type of a rule set parameter from one or more input links. No parameters from the output link are compatible with a parameter from the input link.

User response: Complete one of the following tasks:
- Ensure that one or more output links has a rule set parameter of a Java type that is compatible with the Java type of the rule set parameter of one or more input links.
- Disable unmatched field propagation for the stage.
- Configure the stage to use a propagation strategy that is not based on Java object identifiers.

IIS-CONN-JRULES-00057E  The column column name is a candidate for field propagation on the input link and is also defined on the output link. However the data types do not match and hence data will not be propagated for this column.

Explanation: The connector is configured to propagate unmatched fields. An unmatched input column is eligible for propagation, and a column with the same name on the output link is associated with the input link for propagation. However, the data types of the two columns do not match. As a result, the field values for the column cannot be propagated.

User response: Ensure that the data type of the unmatched field is the same on the input link as on the output link that is associated with the input link for unmatched field propagation.

IIS-CONN-JRULES-20001W  A request was made to the connector to close the JRules session, but the session was never established or it has already been closed.

Explanation: The connector tried to close an IBM WebSphere ILOG JRules session, but the session was never established or was already closed.

User response: An internal problem might exist in the connector or the connector environment. Recompile the job, and run it again. If this message is shown again, contact IBM Software Support.

IIS-CONN-JRULES-20002W  A request was made to the connector to close the JRules session, but the session was never established or it has already been closed.

Explanation: The connector tried to close an IBM WebSphere ILOG JRules session, but the session was never established or was already closed.

User response: An internal problem might exist in the connector or the connector environment. Recompile the job, and run it again. If this message is shown again, contact IBM Software Support.

IIS-CONN-JRULES-30001I  The connector will enforce the batch of 1 because the ruleset parameter Java type: class name is not an array type and the key processing is not enabled for the stage.

Explanation: When a rule set parameter is not an array Java type, the batch size must be 1 only if the stage is configured to work in key mode. Because the stage was not configured in key mode, the connector enforced the batch size of 1 automatically.

User response: To eliminate this message, set the batch size to 1 in the stage. If a batch size greater than 1 is needed, ensure that all rule set parameters are based on array Java types, or enable key mode for the stage.

IIS-CONN-JRULES-30002I  The connector will enforce the batch size of 1 because the ruleset parameter Java type: class name specified for the master input link is not of an array type.

Explanation: When a rule set parameter for the master input link is not an array Java type, the batch size must be 1.

The connector enforced the batch size of 1 automatically.

User response: To eliminate this message, set the batch size to 1 in the stage. If a batch size greater than 1 is needed, ensure that all rule set parameters for the master link are based on an array Java type.

IIS-CONN-JRULES-30003I  No records were found on the secondary input link at index index that match any of the records retrieved on the master input link.

Explanation: When the connector ran in key mode, it could not find any records on the secondary link that match the key value of the records that were retrieved from the master link in the same rule execution cycle. No records from the secondary link will be passed for the rule set parameter that is associated with this link.

User response: An internal problem might exist in the connector or the connector environment. Recompile the job, and run it again. If this message is shown again, contact IBM Software Support.

Message reference: IBM WebSphere ILOG JRules connector  11
during the same rule execution cycle.

User response: If this scenario is expected, no action is required. If records were expected on the input link, ensure that the matching records for the input link are available for all the key values from the master link records that are used for matching.

IIS-CONN-JRULES-30004I CC_JRULES expression was not specified in the description attribute of the input column: column name.

Explanation: The specified input column is not used to prepare a rule set parameter value for the link. The column is unmatched and is eligible for unmatched field propagation if propagation was enabled for the stage.

User response: If the column was expected to be used for the rule set parameter value, ensure that the appropriate mapping is defined. You can define mapping implicitly or by using a CC_JRules expression in the Description attribute of the column.

IIS-CONN-JRULES-30005I CC_JRULES expression was not specified in the description attribute of the output column: column name.

Explanation: The specified output column is not initialized from the rule set parameter value for the link. This column is unmatched and can be a target for unmatched field propagation if propagation was enabled for the stage.

User response: If the column was expected to be initialized from the rule set parameter value, ensure that the appropriate mapping is defined. You can define mapping implicitly or by using a CC_JRules expression in the Description attribute of the column.

IIS-CONN-JRULES-30006I The fields: column names in the record have the value: value and the expected value for this field is one of the following: expected values.

Explanation: When the connector ran in key mode, it rejected some input records due to a key mismatch condition.

User response: If records with mismatched key values are expected, no action is required. Otherwise, ensure that the key column values in the rejected records match the values in the master key records.

IIS-CONN-JRULES-30007I The link at index link index does not have any more records available that can be combined with the master link record to invoke the ruleset or it is a buffer link that is associated with a ruleset parameter that is not of an array type. The leftover records will be sent to the reject link.

Explanation: Records on the input link were rejected because they do not match records that were retrieved on the master input link.

User response: No action is required.

IIS-CONN-JRULES-30008I The field: column name in the record has the NULL value and the ruleset parameter definition does not accept NULL values for this field.

Explanation: A record on the input link was rejected because the record has a NULL value for the specified field. This field is used to initialize the rule set parameter for the link, but the NULL value is not valid for the corresponding Java type in the rule set parameter.

User response: Complete one of the following tasks:
- If records with NULL values for the specified field are expected and can be skipped when the rule set parameter value for the link is initialized, no action is required.
- Inspect the rejected records, and investigate why NULL values were found for the field.
- Configure the rule set parameter to accept NULL values for this field.

IIS-CONN-JRULES-30009I The ruleset at location: ruleset location was successfully loaded and parsed.

Explanation: The IBM WebSphere ILOG JRules engine loaded and parsed the specified rule set for the connector.

User response: No action is required.

IIS-CONN-JRULES-30010I The connector established a JRules session.

Explanation: The connector established a session in the IBM WebSphere ILOG JRules environment.

User response: No action is required.

IIS-CONN-JRULES-30011I The batch processing was enabled for the stage. The batch size is: batch size.

Explanation: The connector was configured to work in batch mode.
User response: No action is required.

IIS-CONN-JRULES-30012I  The key processing was enabled for the stage. The key columns are: key columns.

Explanation: The connector was configured to work in key mode.

User response: No action is required.

IIS-CONN-JRULES-30013I  Number of times the ruleset was invoked on the current node: count

Explanation: The rule set was invoked count times on the current node (player process). If the stage is running in parallel on multiple nodes, the total number of times that the rule set was invoked is the sum of the number of invocations on each node.

User response: No action is required.

IIS-CONN-JRULES-30014I  The batch processing was disabled and the key processing was enabled for the stage. The connector will automatically run in key mode with the batch size of 0.

Explanation: The connector was not configured to run in key mode, but batch processing was disabled. The connector will run in key mode with a batch size of 0, which means that the batch size is unlimited.

User response: No action is required.

IIS-CONN-JRULES-30015I  The batch processing and key processing were disabled for the stage. The connector will automatically run in key mode with the batch size of 1.

Explanation: The connector was not configured to run in key mode or batch mode. The connector will run in key mode with a batch size of 1.

User response: No action is required.

IIS-CONN-JRULES-30016I  The connector stage was configured to run in parallel mode on node count nodes.

Explanation: The connector will run in parallel mode on the specified number of nodes (player processes).

User response: No action is required.

IIS-CONN-JRULES-30017I  The connector stage was configured to run in sequential mode.

Explanation: The connector will run in sequential mode.

User response: No action is required.

IIS-CONN-JRULES-30018I  The connector will enforce the use of hash partitioner on the current link based on the key columns specified for the stage.

Explanation: The connector was configured to run in parallel mode and in key mode. To ensure that input records with matching key values are processed on the same node (player process), the connector completes the following steps:
- Ensures that hash partitioning is used on the current link
- Applies hashing on the key columns that are specified for the stage

User response: No action is required.

IIS-CONN-JRULES-30019I  The connector will enforce sorting of input records on the current link based on the key columns specified for the stage.

Explanation: The connector was configured to run in key mode. To ensure that input records are sorted based on key values, the connector enforces the sorting of input records on the current link based on the key columns that are specified for the stage.

User response: No action is required.

IIS-CONN-JRULES-63300E  The ruleset filter expression was not specified. The wizard requires that a non-empty ruleset filter expression is specified.

Explanation: When the configuration wizard is configured in core engine mode, the rule set location is the fully qualified path to the rule set archive file. For the configuration wizard to find the rule set archive file, the rule set filter expression must be specified.

User response: Specify the rule set filter expression. The expression can be the path to a rule set archive file or the path to a directory that contains one or more archive files. If the expression is a path to a directory, you must select an archive file after you specify the expression.

IIS-CONN-JRULES-63301E  A source code directory path value must be specified. Specify the full path for an existing directory on the engine tier machine.

Explanation: The directory to generate the code in must be specified.

User response: Specify the full path to the source code directory, and ensure that the directory exists on the engine tier computer.
IIS-CONN-JRULES-63302E The specified directory (directory path) does not exist on the engine tier host. Ensure that the directory exists, that it can be written to and that it is a directory and not a file.

Explanation: The directory to generate the code in was specified, but the directory does not exist or cannot be accessed by the configuration wizard.

User response: Complete the following steps:
1. Ensure that the full path to the source code directory is specified.
2. Ensure that the directory exists on the engine tier computer and that write access is enabled on the directory.

IIS-CONN-JRULES-63303E File file path already exists and selection was made not to overwrite existing files.

Explanation: The file that the configuration wizard tried to generate already exists. Because the configuration wizard was configured to not overwrite existing files, the wizard cannot proceed.

User response: Complete one of the following steps:
- Back up the existing file with the same name, and then remove it.
- To use a different file name, specify a different name for the rule set parameter class.
- Configure the wizard to overwrite existing files automatically.

IIS-CONN-JRULES-63304E The code for the Java type class name cannot be generated because no column was found on link link name to match the argument first argument index of the method method name in this Java type. The argument at position first argument index must exist because the argument second argument index exists and is matched by the column column name on the same link.

Explanation: The configuration wizard generates Java code. The CC_JRules expression in the Description attribute of the column column name on the link link name maps the column to argument second argument index of the method method name for the generated Java class type class name. However, the connector could not detect a column on the same link to use for the argument first argument index in the same method. The column to use for argument first argument index must be specified because the column to use for argument second argument index is specified. The configuration wizard cannot continue because it does not have the information to generate method method name.

User response: Ensure that the columns on the link are configured correctly. If a column is specified for the argument at index index_number for a particular method, ensure that columns are specified for all arguments at indexes that have a number that is less than index_number for the same method. For example, if the CC_JRules expression CC_JRules(setInfo, 3); is specified for a column, ensure that columns with the expressions CC_JRules(setInfo,1); and CC_JRules(setInfo,2); are also specified.

IIS-CONN-JRULES-63305E The column column name on link link name specifies argument position argument index in the description expression. The argument positions must be greater than 0 and smaller than maximum index.

Explanation: In column column name on link link name, the method argument index argument index in the CC_JRules expression in the Description attribute is invalid. Argument indexes must be positive integers that are less than maximum index.

User response: In the CC_JRules expression for column column name, specify a valid method argument index.

IIS-CONN-JRULES-63306E The column column name on the output link {1} has description expression which includes argument specification (link name). Argument specifications in description expressions are allowed only for input link columns.

Explanation: The column column name on output link {1} has a CC_JRules expression in the Description attribute, and this expression includes the following argument specification: (link name). Argument specifications can be used only for columns on input links. Columns on output links correspond to method return values and not method arguments.

User response: In the CC_JRules expression for column column name on output link {1}, specify a valid CC_JRules expression that does not include a method argument index.

IIS-CONN-JRULES-63307E A member variable prefix value must be specified.

Explanation: A prefix for names of the member variables of Java classes must be specified.

User response: Specify a member variable prefix. For example, you might specify _ or m_.
The selected ruleset has input parameter count input parameter(s), output parameter count output parameter(s) and input/output parameter count input/output parameter(s). Consequently, the stage must have required input link count input link(s) and required output link count output link(s) but it currently has current input link count input link(s) and current output link count output link(s). Select a different ruleset or exit the wizard and define the correct number of links on the stage then repeat the operation.

Explanation:
The number of links on the stage must match the rule set parameters in the following ways:

- Each input parameter and input/output parameter of the rule set must have an input link associated with it.
- Each output parameter and input/output parameter must have an output link associated with it.

User response:
- Complete one of the following steps:
  - Specify a different rule set.
  - Exit the wizard and add the missing links, then run the wizard again.

The specified column name is invalid. Column names must start with an alphabetic or underscore (_) character and must contain alpha-numeric, underscore (_), dollar ($) and period (.) characters only.

Explanation:
The column name for one of the links was specified manually and is invalid. Column names must start with a letter or underscore (_) and must contain only alphanumeric characters, underscores (_), dollar signs ($), and periods (.)

User response:
- Specify a valid name for the column.

The selected archive file path could not be parsed. The reported error is: error text

Explanation:
IBM WebSphere ILOG JRules could not parse the specified rule set archive file.

User response:
The action depends on the error that is specified in the message. If the error is at the operating system level or IBM WebSphere ILOG JRules product level, consult the relevant documentation for more details and suggestions about how to resolve the error.

A ruleset must be selected. Select the ruleset for which to configure the stage.

Explanation:
The rule set to configure the stage for must be specified.

User response:
- Select a rule set from the list of rule sets.

Multiple rulesets were selected and only one ruleset is allowed to be selected. The wizard automatically preserved the first selected ruleset and cleared the remaining selections. Click Next to proceed with the automatic selection or choose a different ruleset and ensure that it is the only ruleset that was selected.

Explanation:
Only one rule set to configure the stage for can be specified. The wizard detected that multiple rule sets were selected and cleared all selections except the first one.

User response:
- Ensure that the correct rule set is selected.

The specified log file file path could not be opened. The error message is: error text

Explanation:
The configuration wizard could not open the specified log file to write log messages to it.

User response:
- Ensure that the specified path to the log file is valid.

One or more Java XOM classes could not be found. The wizard requires access to these classes in order to configure link schema definitions for the stage. Ensure that the classes are included in the classpath and retry the operation. The classes that could not be found are: class names

Explanation:
When the configuration wizard is used to configure the stage for a ruleset, it must be able to locate Java classes of ruleset XOM parameters, so that it
can inspect them and provide options for configuring schemas of the links of the stage. One or more Java classes could not be loaded. The classes that could not be loaded are listed in class names.

**User response:** Ensure that the specified classes are included in the class path specified for the stage.

---

### IIS-CONN-JRULES-63316E

**Message:** The selected ruleset path *ruleset location* could not be processed.

**Explanation:** The configuration wizard could not process the specified rule set.

**User response:** The action depends on the error text. If the error is at the operating system level or IBM WebSphere ILOG JRules product level, consult the respective documentation for more details and suggestions how to resolve the error.

### IIS-CONN-JRULES-63317E

**Message:** The JRules management session could not be created. The reported error is: *error text*.

**Explanation:** The configuration wizard could not establish an IBM WebSphere ILOG JRules management session.

**User response:** The action depends on the error text. If the error is at the operating system level or JRules product level, consult the respective documentation for more details and suggestions how to resolve the error.

### IIS-CONN-JRULES-63318E

**Message:** The internal JRules wrapper object could not be accessed. Ensure that the required JRules resources are specified in the class path.

**Explanation:** The configuration wizard could not access the internal object that acts as the wrapper for IBM WebSphere ILOG JRules classes.

**User response:** Ensure that the required IBM WebSphere ILOG JRules classes and configuration files are specified in the class path. The required classes and other resources depend on the engine mode that is specified in the IBM WebSphere ILOG JRules Connector stage. For more information about class path requirements for the stage, see the connector documentation. If the error is at the operating system level or JRules product level, consult the respective documentation for more details and suggestions how to resolve the error.

### IIS-CONN-JRULES-63319E

**Message:** The specified filter expression *filter expression* does not point to an existing directory or file on the engine tier host. Ensure that the full path to an existing directory or file is specified.

**Explanation:** When the configuration wizard is configured in core engine mode, the rule set location value must be the fully qualified path to the rule set archive file. The rule set filter expression is specified, but it does not point to a rule set archive file or a directory.

**User response:** In the filter expression, specify a path a rule set archive file or a path to a directory that contains one or more rule set archive files.

### IIS-CONN-JRULES-63320E

**Message:** The specified filter expression *filter expression* points to a file that is not an archive. When an existing file is specified it must have *jar* or *zip* extension.

**Explanation:** When the configuration wizard is configured in core engine mode, the rule set location value must be the fully qualified path to the rule set archive file. The specified filter expression points to a file that is not a valid rule set archive.

**User response:** Ensure that the specified rule set expression is either a path to a rule set archive file or path to a directory that contains one or more rule set archives. When the expression is a path to rule set archive, the archive file must have the *jar* or *zip* file extension.

### IIS-CONN-JRULES-63321E

**Message:** The link *first link name* does not have parameter name specified and the link *second link name* has parameter name *parameter name* specified. If one link has parameter name specified, then all links must have the parameter name specified. Ensure that all links specify valid and unique parameter names, or remove the parameter names from all links.

**Explanation:** When the configuration wizard is used to configure the stage for a rule set, rule set parameter names must be specified on all nonreject links of the stage, or they must be omitted for all links. The rule set parameter name was set on some of the links but not on all of them.

**User response:** Ensure that the rule set parameter is set on each nonreject link of the stage or is not set on any of them.

### IIS-CONN-JRULES-63322E

**Message:** The link *first link name* and the link *second link name* both have the direction *link direction* and they specify the same parameter name *parameter name*. Links that have the same direction must not specify the same parameter name.

**Explanation:** Two links can specify the same rule set parameter name only under the following conditions:
IIS-CONN-JRULES-63323E • IIS-CONN-JRULES-65000E

- One of the links is an input link and the other link is an output link.
- The rule set parameter is an input/output parameter.

Two links specify the same rule set parameter name, but both of them are either input or output links.

**User response:** Ensure that links with the same direction do not specify the same rule set parameter name.

---

**IIS-CONN-JRULES-63323E**  The link *link name* specifies parameter name *parameter name* which is not found in the ruleset. When parameter names are specified for the links they must match the existing parameter names of the ruleset for which the stage is configured.

**Explanation:** The *parameter name* rule set parameter name was specified for the *link name* link, but the parameter was not found in the specified rule set.

**User response:** Complete one of the following steps:
- Ensure that the rule set that is specified for the stage contains rule set parameter *parameter name*.
- Set the correct rule set parameter name on the link, and then invoke the wizard again.
- Clear rule set parameter names from all links, and then invoke the wizard again.

---

**IIS-CONN-JRULES-63324E**  The link *link name* specifies parameter name *parameter name* which is not valid because the direction of the link is *link direction* and the direction of the parameter is *parameter direction*.

**Explanation:** The rule set parameter that is specified for the *link name* link has a direction that is not compatible with the direction of the link. Input links can use input and input/output rule set parameters, and output links can use output and input/output rule set parameters.

**User response:** Ensure that the direction of the link and the direction of the parameter are compatible.

---

**IIS-CONN-JRULES-63325E**  The column name *column name* is specified more than once. All the column names on the link must be unique.

**Explanation:** The *column name* column name was specified manually more than once for the same link. Column names on the link must be unique.

**User response:** Specify a unique name for the column.
Appendix A. Product accessibility

You can get information about the accessibility status of IBM® products.

The IBM InfoSphere® Information Server product modules and user interfaces are not fully accessible. The installation program installs the following product modules and components:

- IBM InfoSphere Blueprint Director
- IBM InfoSphere Discovery
- IBM InfoSphere Metadata Workbench
- IBM InfoSphere Business Glossary
- IBM InfoSphere Business Glossary Anywhere
- IBM InfoSphere Information Analyzer
- IBM InfoSphere QualityStage®
- IBM InfoSphere Information Services Director
- IBM InfoSphere DataStage®
- IBM InfoSphere DataStage and QualityStage Designer
- IBM InfoSphere Data Click
- IBM InfoSphere FastTrack
- IBM InfoSphere Data Replication

For information about the accessibility status of IBM products, see the IBM product accessibility information at [http://www.ibm.com/able/product_accessibility/index.html](http://www.ibm.com/able/product_accessibility/index.html).

Accessible documentation

Accessible documentation for InfoSphere Information Server products is provided in an information center. The information center presents the documentation in XHTML 1.0 format, which is viewable in most web browsers. Because the information center uses XHTML, you can set display preferences in your browser. This also allows you to use screen readers and other assistive technologies to access the documentation.

The documentation that is in the information center is also provided in PDF files, which are not fully accessible.

IBM and accessibility

See the [IBM Human Ability and Accessibility Center](http://www.ibm.com/able) for more information about the commitment that IBM has to accessibility.
Appendix B. Reading command-line syntax

This documentation uses special characters to define the command-line syntax.

The following special characters define the command-line syntax:

- **[]** Identifies an optional argument. Arguments that are not enclosed in brackets are required.
- **...** Indicates that you can specify multiple values for the previous argument.
- **|** Indicates mutually exclusive information. You can use the argument to the left of the separator or the argument to the right of the separator. You cannot use both arguments in a single use of the command.
- **{}** Delimits a set of mutually exclusive arguments when one of the arguments is required. If the arguments are optional, they are enclosed in brackets ([ ]).

**Note:**
- The maximum number of characters in an argument is 256.
- Enclose argument values that have embedded spaces with either single or double quotation marks.

For example:

**wsetsrc**

```
[-S server] [-l label] [-n name] source
```

The `source` argument is the only required argument for the `wsetsrc` command. The brackets around the other arguments indicate that these arguments are optional.

**wlsac**

```
[-l | -f format] [key...] profile
```

In this example, the -l and -f format arguments are mutually exclusive and optional. The `profile` argument is required. The `key` argument is optional. The ellipsis (...) that follows the `key` argument indicates that you can specify multiple key names.

**wrb -import**

```
{rule_pack | rule_set}...
```

In this example, the `rule_pack` and `rule_set` arguments are mutually exclusive, but one of the arguments must be specified. Also, the ellipsis marks (...) indicate that you can specify multiple rule packs or rule sets.
Appendix C. How to read syntax diagrams

The following rules apply to the syntax diagrams that are used in this information:

- Read the syntax diagrams from left to right, from top to bottom, following the path of the line. The following conventions are used:
  - The >>---- symbol indicates the beginning of a syntax diagram.
  - The ---> symbol indicates that the syntax diagram is continued on the next line.
  - The >---- symbol indicates that a syntax diagram is continued from the previous line.
  - The --->< symbol indicates the end of a syntax diagram.
- Required items appear on the horizontal line (the main path).

```
>>>---required_item---
```

- Optional items appear below the main path.

```
>>>---required_item---   
|optional_item|
```

If an optional item appears above the main path, that item has no effect on the execution of the syntax element and is used only for readability.

```
>>>---required_item---   
|optional_item|
```

- If you can choose from two or more items, they appear vertically, in a stack. If you must choose one of the items, one item of the stack appears on the main path.

```
>>>---required_item---   
|required_choice1---   
|required_choice2|
```

If choosing one of the items is optional, the entire stack appears below the main path.

```
>>>---required_item---   
|optional_choice1---   
|optional_choice2|
```

If one of the items is the default, it appears above the main path, and the remaining choices are shown below.

```
>>>---required_item---   
|default_choice---   
|optional_choice1---   
|optional_choice2|
```

- An arrow returning to the left, above the main line, indicates an item that can be repeated.
If the repeat arrow contains a comma, you must separate repeated items with a comma.

A repeat arrow above a stack indicates that you can repeat the items in the stack.

- Sometimes a diagram must be split into fragments. The syntax fragment is shown separately from the main syntax diagram, but the contents of the fragment should be read as if they are on the main path of the diagram.

**Fragment-name:**

- Keywords, and their minimum abbreviations if applicable, appear in uppercase. They must be spelled exactly as shown.
- Variables appear in all lowercase italic letters (for example, `column-name`). They represent user-supplied names or values.
- Separate keywords and parameters by at least one space if no intervening punctuation is shown in the diagram.
- Enter punctuation marks, parentheses, arithmetic operators, and other symbols, exactly as shown in the diagram.
- Footnotes are shown by a number in parentheses, for example (1).
Appendix D. Contacting IBM

You can contact IBM for customer support, software services, product information, and general information. You also can provide feedback to IBM about products and documentation.

The following table lists resources for customer support, software services, training, and product and solutions information.

Table 1. IBM resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description and location</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Support Portal</td>
<td>You can customize support information by choosing the products and the topics that interest you at <a href="http://www.ibm.com/support/entry/portal/Software/Information_Management/InfoSphereInformation_Server">www.ibm.com/support/entry/portal/Software/Information_Management/InfoSphereInformation_Server</a></td>
</tr>
<tr>
<td>Software services</td>
<td>You can find information about software, IT, and business consulting services, on the solutions site at <a href="http://www.ibm.com/businesssolutions/">www.ibm.com/businesssolutions/</a></td>
</tr>
<tr>
<td>My IBM</td>
<td>You can manage links to IBM Web sites and information that meet your specific technical support needs by creating an account on the My IBM site at <a href="http://www.ibm.com/account/">www.ibm.com/account/</a></td>
</tr>
<tr>
<td>Training and certification</td>
<td>You can learn about technical training and education services designed for individuals, companies, and public organizations to acquire, maintain, and optimize their IT skills at <a href="http://www.ibm.com/training">http://www.ibm.com/training</a></td>
</tr>
</tbody>
</table>
Appendix E. Accessing and providing feedback on the product documentation

Documentation is provided in a variety of locations and formats, including in help that is opened directly from the product client interfaces, in a suite-wide information center, and in PDF file books.

The information center is installed as a common service with InfoSphere Information Server information center. The information center contains help for most of the product interfaces, as well as complete documentation for all the product modules in the suite. You can open the information center from the installed product or from a web browser.

Accessing the information center

You can use the following methods to open the installed information center.

• Click the Help link in the upper right of the client interface.

  Note: From IBM InfoSphere FastTrack and IBM InfoSphere Information Server Manager, the main Help menu item opens a local help system. Choose Help > Open Info Center to open the full InfoSphere Information Server information center.

• Press the F1 key. The F1 key typically opens the topic that describes the current context of the client interface.

  Note: The F1 key does not work in web clients.

• Use a web browser to access the installed information center even when you are not logged in to the product. Enter the following address in a web browser:

  http://host_name:port_number/infocenter/topic/com.ibm.swg.im.iis.productization.iisinfsv.home.doc/topics/ic_homepage_IS.html

  where  host_name is the name of the services tier computer where the information center is installed, and  port_number is the port number for InfoSphere Information Server. The default port number is 9080. For example, on a Microsoft® Windows® Server computer named server1, that uses the default port, the web address is in the following format:


A subset of the information center is also available on the IBM website and periodically refreshed at http://pic.dhe.ibm.com/infocenter/iisinfsv/v9r1/index.jsp. This information center is the most up-to-date version and might include corrections, provided as comments.

Obtaining PDF and hardcopy documentation

• The PDF file books are available online and can be accessed from this support document: https://www.ibm.com/support/docview.wss?uid=swg27008803

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### Providing comments on the documentation

Your feedback helps IBM to provide quality information. You can use any of the following methods to provide comments:

- To provide a comment about the information center that is hosted on the IBM website, sign in and add a comment. Comments submitted this way are viewable by the public. See for more information.

- To send a comment about the information to IBM that is not viewable by anyone else, click the **Feedback** link on the top right side of any topic in the information center. You can do this from an information center that is installed with InfoSphere Information Server or from the information center that is available on the IBM website.

- **Send your comments by using the online readers’ comment form at [www.ibm.com/software/awdtools/rcf/](http://www.ibm.com/software/awdtools/rcf/)**

- Send your comments by e-mail to comments@us.ibm.com. Include the name of the product, the version number of the product, and the name and part number of the information (if applicable). If you are commenting on specific text, include the location of the text (for example, a title, a table number, or a page number).
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**Table 2. Use of cookies by InfoSphere Information Server products and components**

<table>
<thead>
<tr>
<th>Product module</th>
<th>Component or feature</th>
<th>Type of cookie that is used</th>
<th>Collect this data</th>
<th>Purpose of data</th>
<th>Disabling the cookies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any (part of InfoSphere Information Server installation)</td>
<td>InfoSphere Information Server web console</td>
<td>Session, Persistent</td>
<td>User name</td>
<td>Session management, Authentication</td>
<td>Cannot be disabled</td>
</tr>
<tr>
<td>Any (part of InfoSphere Metadata Asset Manager)</td>
<td>InfoSphere Metadata Asset Manager</td>
<td>Session, Persistent</td>
<td>No personally identifiable information</td>
<td>Session management, Authentication, Enhanced user usability, Single sign-on configuration</td>
<td>Cannot be disabled</td>
</tr>
<tr>
<td>InfoSphere DataStage</td>
<td>Big Data File stage</td>
<td>Session, Persistent</td>
<td>User name, Digital signature, Session ID</td>
<td>Session management, Authentication, Single sign-on configuration</td>
<td>Cannot be disabled</td>
</tr>
</tbody>
</table>
Table 2. Use of cookies by InfoSphere Information Server products and components (continued)

<table>
<thead>
<tr>
<th>Product module</th>
<th>Component or feature</th>
<th>Type of cookie that is used</th>
<th>Collect this data</th>
<th>Purpose of data</th>
<th>Disabling the cookies</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfoSphere DataStage</td>
<td>XML stage</td>
<td>Session</td>
<td>Internal identifiers</td>
<td>• Session management</td>
<td>Cannot be disabled</td>
</tr>
<tr>
<td></td>
<td>IBM InfoSphere DataStage and QualityStage Operations Console</td>
<td>Session</td>
<td>No personally identifiable information</td>
<td>• Session management</td>
<td>Cannot be disabled</td>
</tr>
<tr>
<td></td>
<td>InfoSphere Data Quality Console</td>
<td>Session</td>
<td>No personally identifiable information</td>
<td>• Session management</td>
<td>Cannot be disabled</td>
</tr>
<tr>
<td></td>
<td>Information Governance Catalog</td>
<td>Session</td>
<td></td>
<td>• Session management</td>
<td>Cannot be disabled</td>
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<tr>
<td></td>
<td>InfoSphere Blueprint Director, InfoSphere Business Glossary, InfoSphere Metadata Workbench</td>
<td>Session</td>
<td></td>
<td>• Internal identifiers</td>
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<td>• Session management</td>
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<td>• Enhanced user usability</td>
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