



Informatica® Cloud Data Integration

# Web Service Consumer Connector

## Informatica Cloud Data Integration Web Service Consumer Connector

April 2020

© Copyright Informatica LLC 2019, 2020

This software and documentation are provided only under a separate license agreement containing restrictions on use and disclosure. No part of this document may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without prior consent of Informatica LLC.

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation is subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License.

Informatica, the Informatica logo, Informatica Cloud, and PowerCenter are trademarks or registered trademarks of Informatica LLC in the United States and many jurisdictions throughout the world. A current list of Informatica trademarks is available on the web at <https://www.informatica.com/trademarks.html>. Other company and product names may be trade names or trademarks of their respective owners.

Portions of this software and/or documentation are subject to copyright held by third parties. Required third party notices are included with the product.

See patents at <https://www.informatica.com/legal/patents.html>.

DISCLAIMER: Informatica LLC provides this documentation "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of noninfringement, merchantability, or use for a particular purpose. Informatica LLC does not warrant that this software or documentation is error free. The information provided in this software or documentation may include technical inaccuracies or typographical errors. The information in this software and documentation is subject to change at any time without notice.

### NOTICES

This Informatica product (the "Software") includes certain drivers (the "DataDirect Drivers") from DataDirect Technologies, an operating company of Progress Software Corporation ("DataDirect") which are subject to the following terms and conditions:

1. THE DATADIRECT DRIVERS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
2. IN NO EVENT WILL DATADIRECT OR ITS THIRD PARTY SUPPLIERS BE LIABLE TO THE END-USER CUSTOMER FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES ARISING OUT OF THE USE OF THE ODBC DRIVERS, WHETHER OR NOT INFORMED OF THE POSSIBILITIES OF DAMAGES IN ADVANCE. THESE LIMITATIONS APPLY TO ALL CAUSES OF ACTION, INCLUDING, WITHOUT LIMITATION, BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION AND OTHER TORTS.

The information in this documentation is subject to change without notice. If you find any problems in this documentation, report them to us at [infa\\_documentation@informatica.com](mailto:infa_documentation@informatica.com).

Informatica products are warranted according to the terms and conditions of the agreements under which they are provided. INFORMATICA PROVIDES THE INFORMATION IN THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

Publication Date: 2020-05-17

# Table of Contents

<b>Preface</b> .....	<b>4</b>
Informatica Resources. ....	4
Informatica Documentation. ....	4
Informatica Intelligent Cloud Services web site. ....	4
Informatica Intelligent Cloud Services Communities. ....	4
Informatica Intelligent Cloud Services Marketplace. ....	4
Data Integration connector documentation. ....	5
Informatica Knowledge Base. ....	5
Informatica Intelligent Cloud Services Trust Center. ....	5
Informatica Global Customer Support. ....	5
<b>Chapter 1: Introduction to Web Service Consumer Connector</b> .....	<b>6</b>
Web Service Consumer Connector. ....	6
Web Service Consumer tasks. ....	6
<b>Chapter 2: Web Service Consumer Connections</b> .....	<b>7</b>
Web Service Consumer connection overview. ....	7
Web Service Consumer connection properties. ....	7
Creating a Web Service Consumer connection. ....	8
<b>Chapter 3: Mapping and Mapping Tasks with Web Service Consumer Connector</b> .....	<b>10</b>
Mappings and mapping tasks overview. ....	10
Web Service Consumer midstream transformation in mappings. ....	10
Advance midstream properties. ....	11
Midstream transformation mapping example. ....	11
Rules and guidelines for Web Service Consumer mappings. ....	15
<b>Chapter 4: Troubleshooting</b> .....	<b>17</b>
Troubleshooting Web Service Consumer Connector. ....	17
<b>Index</b> .....	<b>18</b>

# Preface

Use *Web Service Consumer Connector* to learn how to read from or write to a web Service that supports SOAP API. Learn to create a connection, develop mappings, and run mapping tasks using Cloud Data Integration.

## Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

### Informatica Documentation

Use the Informatica Documentation Portal to explore an extensive library of documentation for current and recent product releases. To explore the Documentation Portal, visit <https://docs.informatica.com>.

If you have questions, comments, or ideas about the product documentation, contact the Informatica Documentation team at [infa\\_documentation@informatica.com](mailto:infa_documentation@informatica.com).

### Informatica Intelligent Cloud Services web site

You can access the Informatica Intelligent Cloud Services web site at <http://www.informatica.com/cloud>. This site contains information about Informatica Cloud integration services.

### Informatica Intelligent Cloud Services Communities

Use the Informatica Intelligent Cloud Services Community to discuss and resolve technical issues. You can also find technical tips, documentation updates, and answers to frequently asked questions.

Access the Informatica Intelligent Cloud Services Community at:

<https://network.informatica.com/community/informatica-network/products/cloud-integration>

Developers can learn more and share tips at the Cloud Developer community:

<https://network.informatica.com/community/informatica-network/products/cloud-integration/cloud-developers>

### Informatica Intelligent Cloud Services Marketplace

Visit the Informatica Marketplace to try and buy Data Integration Connectors, templates, and mapplets:

<https://marketplace.informatica.com/>

## Data Integration connector documentation

You can access documentation for Data Integration Connectors at the Documentation Portal. To explore the Documentation Portal, visit <https://docs.informatica.com>.

## Informatica Knowledge Base

Use the Informatica Knowledge Base to find product resources such as how-to articles, best practices, video tutorials, and answers to frequently asked questions.

To search the Knowledge Base, visit <https://search.informatica.com>. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team at [KB\\_Feedback@informatica.com](mailto:KB_Feedback@informatica.com).

## Informatica Intelligent Cloud Services Trust Center

The Informatica Intelligent Cloud Services Trust Center provides information about Informatica security policies and real-time system availability.

You can access the trust center at <https://www.informatica.com/trust-center.html>.

Subscribe to the Informatica Intelligent Cloud Services Trust Center to receive upgrade, maintenance, and incident notifications. The [Informatica Intelligent Cloud Services Status](#) page displays the production status of all the Informatica cloud products. All maintenance updates are posted to this page, and during an outage, it will have the most current information. To ensure you are notified of updates and outages, you can subscribe to receive updates for a single component or all Informatica Intelligent Cloud Services components. Subscribing to all components is the best way to be certain you never miss an update.

To subscribe, go to <https://status.informatica.com/> and click **SUBSCRIBE TO UPDATES**. You can then choose to receive notifications sent as emails, SMS text messages, webhooks, RSS feeds, or any combination of the four.

## Informatica Global Customer Support

You can contact a Customer Support Center by telephone or online.

For online support, click **Submit Support Request** in Informatica Intelligent Cloud Services. You can also use Online Support to log a case. Online Support requires a login. You can request a login at <https://network.informatica.com/welcome>.

The telephone numbers for Informatica Global Customer Support are available from the Informatica web site at <https://www.informatica.com/services-and-training/support-services/contact-us.html>.

# CHAPTER 1

## Introduction to Web Service Consumer Connector

This chapter includes the following topics:

- [Web Service Consumer Connector, 6](#)
- [Web Service Consumer tasks, 6](#)

### Web Service Consumer Connector

Use Web Service Consumer Connector to connect to web service applications that support SOAP API. You can use Web Service Consumer Connector in a Web Services transformation.

You can use Web Service Consumer Connector midstream in a mapping to pass a single or multiple requests to a web service application and process the response data. You can also pass data obtained from multiple transformations in the mapping pipeline and process the data.

When you use Web Service Consumer Connector midstream in a mapping, you first create a business service for the operation that you want to perform in the web service application. You then associate the business service in a Web Services transformation midstream in a mapping to read from or write data to the web service application.

### Web Service Consumer tasks

You can use Web Service Consumer Connector to create midstream transformations in a mapping task.

## CHAPTER 2

# Web Service Consumer Connections

This chapter includes the following topics:

- [Web Service Consumer connection overview, 7](#)
- [Web Service Consumer connection properties, 7](#)
- [Creating a Web Service Consumer connection, 8](#)

## Web Service Consumer connection overview

Create a Web Service Consumer connection to make calls to a web service application. Web Service Consumer Connector supports SOAP version 1.1 and 1.2. You can create a Web Service Consumer connection on the **Connections** page. Use the Web Service Consumer connection to read data from or write data to Web Service Consumer.

## Web Service Consumer connection properties

When you configure a Web Service Consumer connection, you must configure the connection properties.

The following table describes the Web Service Consumer connection properties:

Property	Description
Connection Name	Enter a unique name for the connection.
Description	Provide a relevant description for the connection.
Type	Select Web Service Consumer from the list.
Runtime Environment	The name of the runtime environment where you want to run the tasks.

Property	Description
Authentication	<p>You can configure the connection to use the following types of authentication:</p> <p><b>Username Token</b></p> <p>Use the user name token and the password to authenticate the web services.</p> <p><b>Other Authentication</b></p> <p>Use the WSDL URL and endpoint URL to authenticate the web services.</p> <p><b>NTLM Authentication</b></p> <p>Use NTLM V2 authentication to authenticate the web services.</p>
WSDL URL	The URL provided by the web service.
Endpoint URL	Endpoint URL for the web service. The WSDL file specifies this URL in the location element.
Username	Applicable if you use Username Token or NTLM authentication. User name to authenticate the web service.
Password	Applicable if you use Username Token or NTLM authentication. Password to authenticate the web service.
DOMAIN NAME	Applicable if you use NTLM authentication. Name of the domain that authenticates the accounts..
Encrypt Password	Applicable if you use Username Token authentication. Enables the PasswordDigest property which combines the password with a nonce and a time stamp. The mapping task applies a SHA hash on the password, encodes it in base64 encoding, and uses the encoded password in the SOAP header.
Must Understand	Applicable if you use Username Token authentication. Specifies whether to process a header entry or not.
HTTP Username	User name to access the web service.
HTTP Password	Password to access the web service.

## Creating a Web Service Consumer connection

Connect to a web service using Web Services Description Language (WSDL) and an endpoint URL. You can also enable security for the web service.

1. In Administrator, select **Connection connections**, and click **New Connection**.
2. Enter the connection details. For the **Type**, select **WSConsumer**.  
If the WSConsumer connection is not in the list of connections, in Administrator, open the **Add-On Connectors** page to install the connector for your organization.
3. Enter the connection properties:
  - a. Select the runtime environment for the web service connection.

- b. For **Authentication**, select one of the following options:
  - Select **Username Token** to enter the user name and the password to authenticate the web service. You can choose to encrypt the password by sending a digest that is derived from the password in the security token.
  - Select **Other Authentication** to enter the WSDL URL and endpoint URL to access the web service. If the web service is a private web service, enter the HTTP user name and password.
  - Select **NTLM Authentication** to enter the username, password, and domain name to access the web service.
4. Enter the authentication connection properties. The properties that appear depend on the authentication that you selected.
5. Save the connection.

## CHAPTER 3

# Mapping and Mapping Tasks with Web Service Consumer Connector

This chapter includes the following topics:

- [Mappings and mapping tasks overview, 10](#)
- [Web Service Consumer midstream transformation in mappings, 10](#)
- [Rules and guidelines for Web Service Consumer mappings, 15](#)

## Mappings and mapping tasks overview

Create a mapping to read or write data to the web service application. When you create a mapping, you can configure midstream transformation to transform data from a web service. The Secure Agent connects to the web service application to access, transform, or deliver data.

## Web Service Consumer midstream transformation in mappings

After you have defined the business service, you can configure the Web Services transformation in a mapping to access or transform data from a web service. The requirements and available options depend on whether you are connecting the Web Services transformation to one source object or to more than one source object.

## Advance midstream properties

The following table describes the properties available for the Web Services transformation from the Advanced tab:

Property	Description
Cache Size for Web Service Request (KB)	Default is 100 KB. If the request is more than 100 KB, you can increase the cache size.
Cache Size for Web Service Response (KB)	Memory available for the web service response. If the web service response contains many rows or columns, you might want to increase the cache size. Default is 100 KB.
Allow Input Flush	The mapping task creates XML when it has all of the data for a group. When enabled, the mapping task flushes the XML after it receives all of the data for the root value. When not enabled, the mapping task stores the XML in memory and creates the XML after it receives data for all the groups. <b>Note:</b> You cannot select the option to allow input flush if you are connecting to multiple source objects.
Transaction Commit Control	Control to commit or roll back transactions based on the set of rows that pass through the transformation. Enter an IIF function to specify the conditions to determine whether the mapping task commits, rolls back, or makes no transaction changes to the row. Use the transaction commit control if you have a large amount of data and you want to control how it is processed. <b>Note:</b> You cannot configure a transaction commit control if you are connecting to multiple source objects.

## Midstream transformation mapping example

The following example demonstrates how to use the Web Service Consumer midstream transformation to interact with NetSuite to get product availability details.

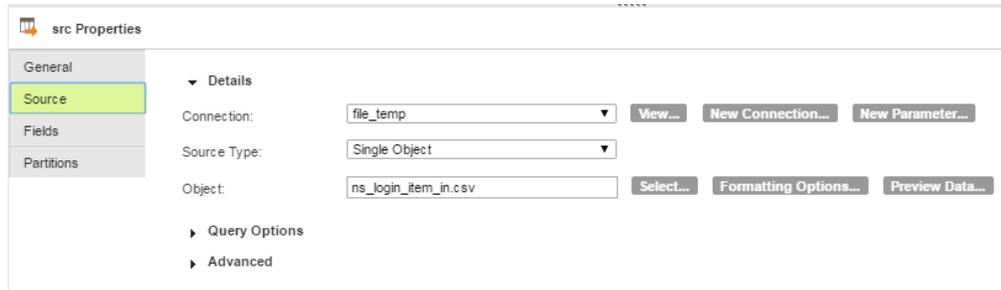
You can review this example to learn how to configure a Web Service Consumer midstream transformation to structure a SOAP request and response using the NetSuite operation, `getItemAvailability`. The midstream transformation passes the item ID in the request. The web service then returns information on the latest item availability in a SOAP response.

First, to connect to the web service, create a WSCConsumer connection. You add a WSDL that describes the request and response web service messages and configures the necessary security.

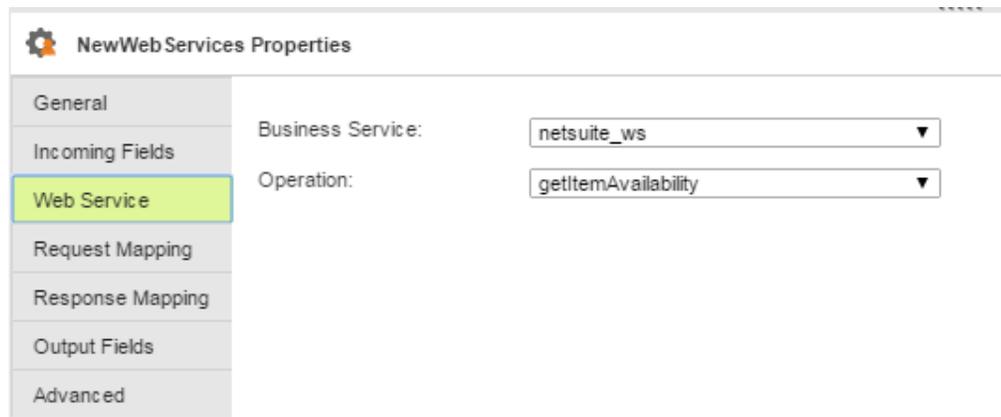
Second, define a business service using the WSCConsumer connection. Use the connection to define a business service and access the `getItemAvailability` operation:

Third, create a mapping that uses the Web Service transformation. The example mapping includes the following configuration options:

1. The source is a simple .csv file that includes four fields with the login details and an item ID:



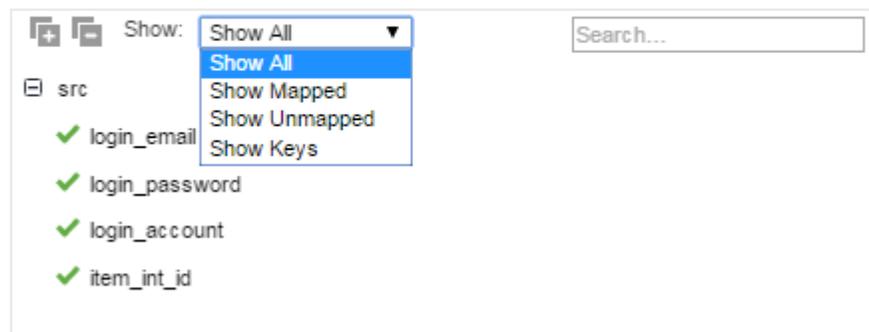
2. On the Web Service tab, select the business service and operation previously defined:



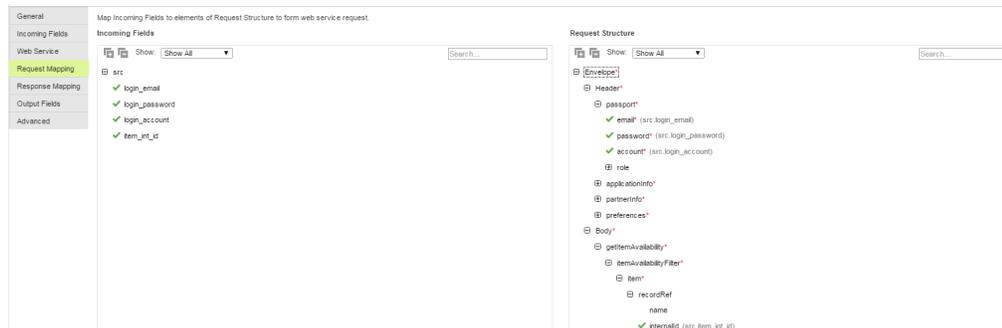
3. After you add a Web Services transformation, you can connect the source and see four incoming fields. You can filter your view of the incoming fields to show all fields, mapped fields, unmapped fields, or keys:

Map Incoming Fields to elements of Request Structure to form web service request.

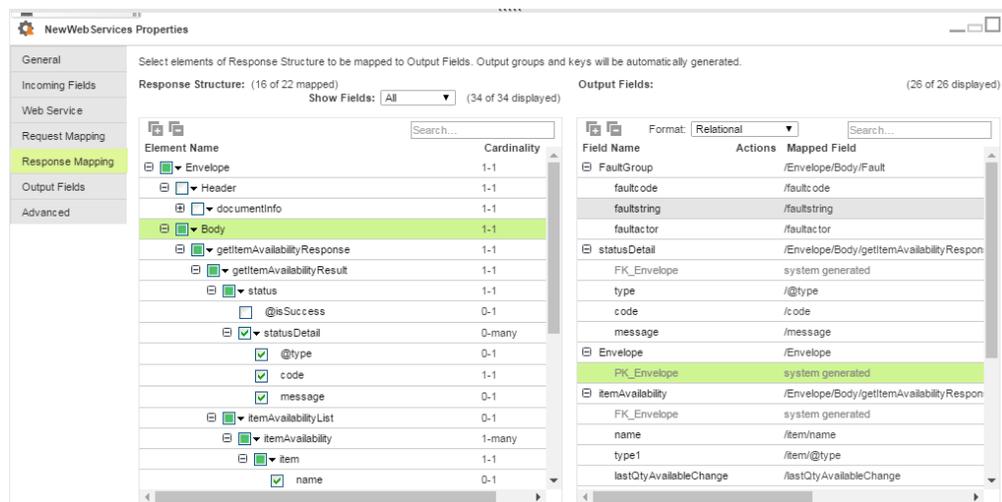
#### Incoming Fields



- In the Request Mapping, the incoming fields are mapped to the SOAP message. The Envelope contains the credentials and the Body contains the item ID, as shown in the following image. You drag incoming fields onto items in the request structure to create the mapping:



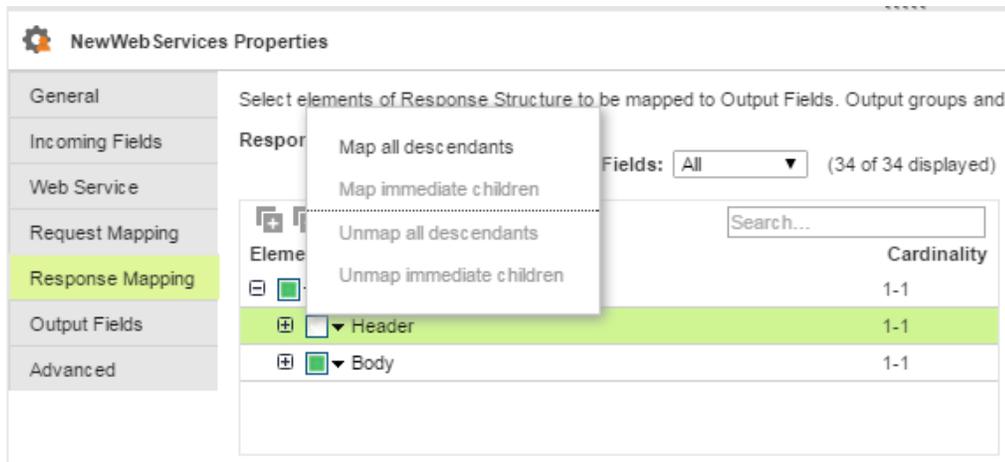
- On the Response Mapping tab, you map the SOAP message to the output fields you want to use. You can choose Relational or Denormalized format for output fields. This example uses Relational format:



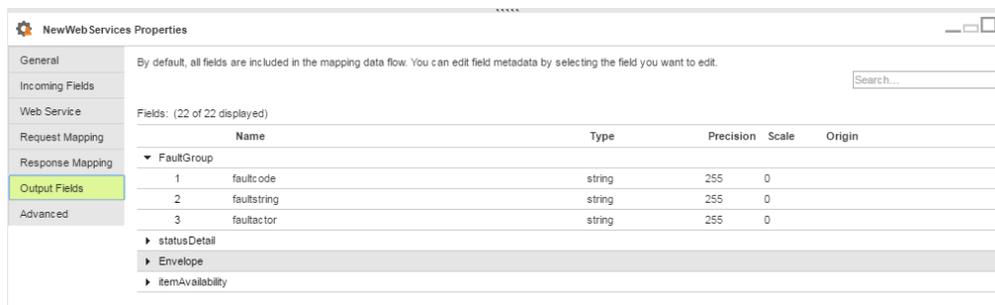
The system generates these output field groups automatically:

- FaultGroup, if it is supported by the connection type you are using.
- Envelope, which contains the documentinfo, if you select elements of response to be mapped to output fields.
- One group for each element you have mapped where the cardinality is greater than one.

The example above has three groups. In the response, you can choose to map or unmap objects and fields by selecting a node in the hierarchy and choosing an option to map (or unmap), as shown in this image. Click the down arrow to display the mapping options for a specific node:



- On the Output Fields tab, you can see each group. If needed, you can edit the type, precision, and scale of the fields:



7. The mapping includes three targets: one for the status, one for the availability, and one for the FaultGroup data:

The image shows three screenshots of the 'Preview Fields' window in a mapping tool, each showing a table of included and excluded fields for a specific target.

**tgt\_default Properties**

Field Name	Type	Precision	Scale	Origin
faultactor	string	255	0	NewWebServices
faultcode	string	255	0	NewWebServices
faultstring	string	255	0	NewWebServices
item_int_id	string	255	0	ns_login_item_i...
login_account	string	255	0	ns_login_item_i...
login_email	string	255	0	ns_login_item_i...

**tgt\_item\_avail Properties**

Field Name	Type	Precision	Scale	Origin
FK_Envelope	bigint	19	0	NewWebServices
item_int_id	string	255	0	ns_login_item_i...
lastQtyAvailableChange	dateTime	29	9	NewWebServices
login_account	string	255	0	ns_login_item_i...
login_email	string	255	0	ns_login_item_i...
login_password	string	255	0	ns_login_item_i...

**tgt\_status Properties**

Field Name	Type	Precision	Scale	Origin
c_code	string	255	0	NewWebServices
FK_Envelope	bigint	19	0	NewWebServices
item_int_id	string	255	0	ns_login_item_i...
login_account	string	255	0	ns_login_item_i...
login_email	string	255	0	ns_login_item_i...
login_password	string	255	0	ns_login_item_i...

When the mapping runs, it returns the item availability and status code. If it cannot successfully run, it creates a record in the default target that contains the fault information.

## Rules and guidelines for Web Service Consumer mappings

Consider the following rules and guidelines for Web Service Consumer mappings:

- Web Service Consumer Connector does not support i18N characters in a field name.
- You cannot extract header details from a response message.
- You cannot extract value from a fault response for the following fields:
  - Detail
  - Role

- When you use the Username Token authentication in a Web Service Consumer connection, the header entry must be empty.
- When you extract subcode values in a fault response for multiple levels in an existing mapping , you must re-select the operation of web service consumer in the mapping.

**Note:** You can extract only five level of subcode values.

## CHAPTER 4

# Troubleshooting

This chapter includes the following topic:

- [Troubleshooting Web Service Consumer Connector, 17](#)

## Troubleshooting Web Service Consumer Connector

When the performance of a mapping task is slow, it might be due to the following reasons:

- The Internet connection is slow.
- Endpoint server request is in wait state and the server is processing the request slow.
- After testing the connection, the value of "Auto CSV File Creation" = "Auto Creation of Body/Header Files".

An error occurs while testing the connection.

- Folder or File creation permission is not available for the user running secure agent service.
- WSDL is not available in the provided path.
- Proper endpoint URL is not provided.
- The endpoint is down, because of which there can be a problem in loading the WSDL. Please try accessing the WSDL using an internet explorer.

# INDEX

## C

Cloud Application Integration community  
URL [4](#)  
Cloud Developer community  
URL [4](#)  
connections  
Web Service Consumer [7](#)  
Web Service Consumer connection [8](#)

## D

Data Integration community  
URL [4](#)

## I

Informatica Global Customer Support  
contact information [5](#)  
Informatica Intelligent Cloud Services  
web site [4](#)

## M

maintenance outages [5](#)

## O

Overview [7](#)

## S

status  
Informatica Intelligent Cloud Services [5](#)  
system status [5](#)

## T

trust site  
description [5](#)

## U

upgrade notifications [5](#)

## W

Web Service Consumer  
connection properties [7](#)  
Web Service Consumer Connection [7](#)  
Web Services Consumer Connector Overview [6](#)  
web site [4](#)