

Sterling Integrator®

Using the AS2 and HTTP TestNow Feature

Version 5.1

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Verifying Trading Partner Profiles for HTTP and AS2

The TestNow option enables you to verify that new or updated HTTP or AS2 profiles are working correctly before using the profiles in production.

The TestNow option is displayed on the Trading Partner Profile list screen for each profile that uses either basic HTTP transport or AS2, as shown in the following example:

The screenshot shows the Sterling Commerce Administration Menu with the 'Profiles' section selected. The 'Profiles' list displays 15 profiles, all of which are enabled and have a 'TestNow' option available. The profiles are organized into two groups: AS2_ORG and AS2_PART. The AS2_ORG group includes profiles for various AS2 identities such as TestNowBadAuthOrg, TestNowBadCertOrg, TestNowBadContractOrg, TestNowBadEndpointOrg, TestNowBadHostOrg, TestNowBadPortOrg, TestNowBadProxyOrg, TestNowBadSSLCliOrg, TestNowBadSSLSrvOrg, TestNowGoodAsyncOrg, TestNowGoodSyncOrg, and TestNowInactiveOrg. The AS2_PART group includes profiles for TestNowBadAuthPrt, TestNowBadCertPrt, and TestNowBadContractPrt. Each profile row includes a 'TestNow' button with a test icon.

Enabled	Select	Name	Identity	Type
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadAuthOrg	TestNowBadAuthOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadCertOrg	TestNowBadCertOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadContractOrg	TestNowBadContractOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadEndpointOrg	TestNowBadEndpointOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadHostOrg	TestNowBadHostOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadPortOrg	TestNowBadPortOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadProxyOrg	TestNowBadProxyOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadSSLCliOrg	TestNowBadSSLCliOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowBadSSLSrvOrg	TestNowBadSSLSrvOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowGoodAsyncOrg	TestNowGoodAsyncOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowGoodSyncOrg	TestNowGoodSyncOrg	AS2
<input checked="" type="checkbox"/>		AS2_ORG_TestNowInactiveOrg	TestNowInactiveOrg	AS2
<input checked="" type="checkbox"/>		AS2_PART_TestNowBadAuthPrt	TestNowBadAuthPrt	AS2
<input checked="" type="checkbox"/>		AS2_PART_TestNowBadCertPrt	TestNowBadCertPrt	AS2
<input checked="" type="checkbox"/>		AS2_PART_TestNowBadContractPrt	TestNowBadContractPrt	AS2

The TestNow option is also available on the Contracts page for AS2 profiles.

How the TestNow Option Works

When you run the TestNow option for a specific AS2 or basic HTTP trading partner profile, it invokes one of two predefined business processes, TestNowHTTP.bpml or TestNowAS2.bpml. Each business process includes tests that verify profile configuration settings. As each test in the business process is completed, its results are shown on the TestNow monitor screen. The TestNow monitor is automatically displayed when you run TestNow. You can use the information displayed about each test to troubleshoot any problems found in the profile settings.

HTTP TestNow Functionality

The HTTP TestNow option is driven by TestNowHTTP.bpml and performs the following tests:

- ◆ Invokes the framework TestNowProfileLookup.bpml.

- ◆ Tests whether the default HTTP Client adapter is enabled.

Note: The TestNow business processes use the default HTTP Client adapter configuration. If your production business process uses a different HTTP Client adapter configuration, it is possible that the business process will not run successfully. Always test an adapter configuration before using it in a production scenario.

- ◆ Tests the proxy connection if configured to use one.
- ◆ Tests the SSL connection if configured to use one.
- ◆ Tests the HTTP connection depending upon the profile configuration.
 - a. Invokes the HTTP Client Begin Session service.
 - b. Invokes the HTTP Client Method service to perform OPTIONS request.
 - c. Invokes the HTTP Client End Session service.

AS2 TestNow Functionality

The AS2 TestNow option is driven by TestNowAS2.bpml and performs the following tests:

- ◆ Invokes the framework TestNowProfileLookup.bpml.
- ◆ Invokes the TestNowHTTP.bpml.
- ◆ Performs the appropriate AS2 tests depending upon the configuration.
 - a. Determines if the associated contract is enabled.
 - b. Invokes EDIINTPipelineBuild to verify message can be built.
This step exercises the certificates if configured to be signed and encrypted.
 - c. Invokes the HTTP Client services to attempt sending the message.
 - d. Depending upon how the profile is configured for MDNs:
 - If no MDN processing specified: the test result shows N/A.
 - If synchronous MDN processing specified: executes the EDIINTPipelineParse to process the MDN received. This step exercises the certificates if configured for use.
 - If sync or async MDN processing specified: executes EDIINTAck to determine if the appropriate MDN was received.

Note: A default document is used as part of the AS2 tests. You cannot select the document to be sent as part of the AS2 tests.

Multi-Organization AS2 TestNow Functionality

This section outlines the differences between single and multiple organization AS2 testing, and additional steps used for multi-organization AS2 testing.

- ◆ A simplified AS2 test business process, which does not perform retries, is used in place of the standard AS2 business processes.
- ◆ For the Advanced Profile UI and profiles with HTTP information:

- ◆ If there is only one contract associated with the selected profile (via AS2_TRADEPART_INFO), it is used as part of the test. If multiple contracts exist, you are prompted to select the contract you want to test.
- ◆ If no entries exist in AS2_TRADEPART_INFO, then contracts which have the selected profile on the consuming side are looked up. If only one contract exists, it is used in the test. If multiple contracts exist, you are prompted to select the contract you want to test.
- ◆ For the AS2 Wizard:

If there is only one relationship associated with the selected profile (via AS2_TRADEPART_INFO), it is used as part of the test. If multiple relationships exist, you are prompted to select the relationship you want to test.
- ◆ For the Relationship page:

The relationship indicates the contract used as part of AS2, so the link never has to redirect to the contract selection screen.

Before Using the TestNow Option

- ◆ Always test new Sterling Integrator components, such as trading partner profiles, service configurations, or maps, on a test system and not on a production system.
- ◆ Contact your trading partner first and coordinate the test with them, so that their system is not impacted and their processing is not disrupted in any way.
- ◆ Before a user can run the TestNow option, you must add the TestNow permission to the user's account. By default, this permission is assigned only to Admin accounts and is not part of any permissions group. The only way for another user to see and use the TestNow option is for the permission to be assigned manually to the user account.

Using the TestNow Option for AS2 and HTTP Profiles

Complete these steps to verify that new or updated HTTP or AS2 profiles are working correctly before using the profiles in production:

1. Select the profile you want to test in Sterling Integrator:
 - ◆ From the Profiles page:
From the Admin Console, select **Trading Partner > Setup > Advanced > Profiles**. In the List pane, click **Go!**.
 - ◆ From the Contracts page:
From the Admin Console, select **Trading Partner > Contracts**. In the List pane, click **Go!**.
 - ◆ From the AS2 Trading Partner Configurations page:
From the Admin Console, select **Trading Partner > AS2**. In the Search Profiles by Identity pane, click **Go!**.

Note: If you have a license to use Multiple Organizations for AS2, you can search by **Relationships** (using Organization and/or Profile) or by searching **Profiles by Identity**. From the Admin Console, select **Trading Partner > AS2**, then search by Relationships or Profiles by Identity and click **Go!**.

2. Select **TestNow** to the left of the profile to be tested. This warning message is displayed:

WARNING: Running a test on a production system can have a negative impact on your trading partner's system. Make sure you are coordinating with your trading partner before running a test. Are you ready to run the test?

Note: This icon will only be displayed for AS2 profiles and profiles which contain an HTTP transport. Click **OK** to begin the test, or **Cancel** if you are not ready.

The TestNow summary page is displayed. Each individual test that the system performs is listed along with its result: Passed, Failed, Warning, Running, or N/A.

The following example TestNow summary page shows the results for a profile that uses the HTTP transport:



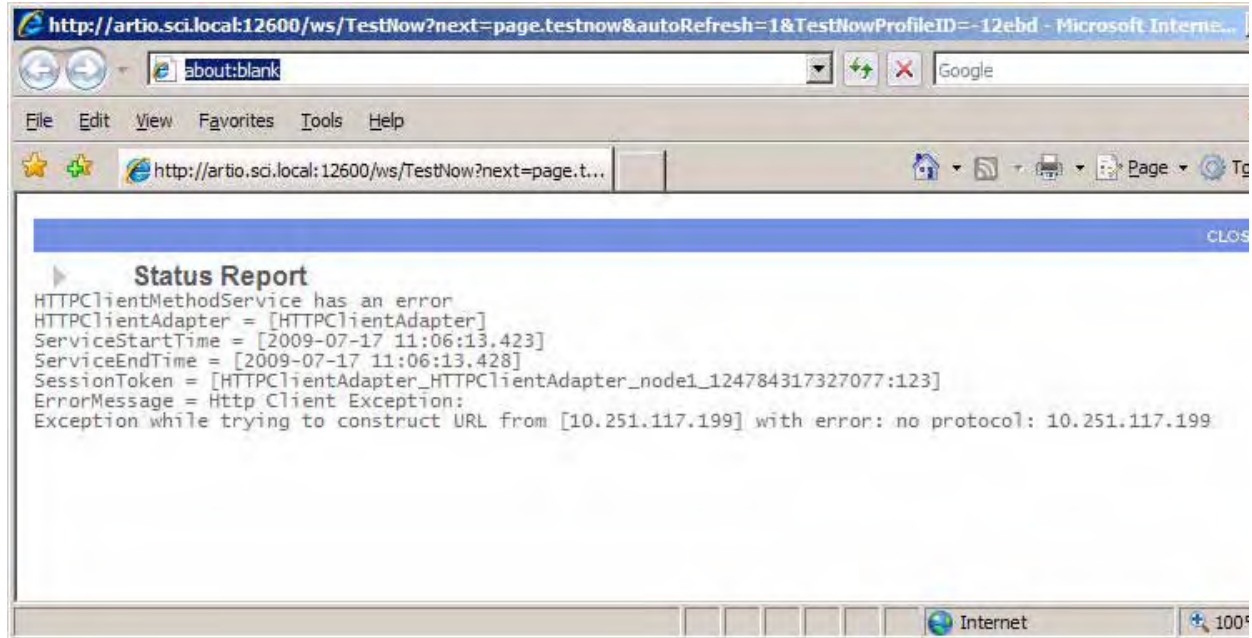
The screenshot shows the 'Test Now - HTTP' summary page. It includes an 'Administration Menu' on the left and a table of test results. The table has columns for Test, Result, Information, and Status. The tests and their results are as follows:

Test	Result	Information	Status
Checking Profile	Passed	profile_joan_1247840827340 is active	
Checking Delivery Channel	Passed	delivchan_joan_1247840865888 is active	
Checking Transport	Passed	transport_joan_1247840865889 is active	
Checking HTTPClientAdapter	Passed	HTTPClientAdapter is enabled	
Proxy Connection	N/A	Not configured to use a proxy	
SSL Connection	N/A	Not configured to use SSL	
HTTP Connection	Failed	Http Client Adapter exception	info

The N/A result indicates that a specific test is not required for this profile. For example, if a profile does not use SSL, the SSL connection test is not run and the result N/A is displayed.

If a test result is Failed, click **info** in the test's Status field to see the status report, which contains additional details about the error.

The following example status report shows the detail for the failed HTTP connection test in the previous screen. You can use the information provided on this screen to assist in troubleshooting the error.



Once you have resolved any errors and edited the profile, you can rerun the TestNow option to verify that the issues have been corrected.

TestNow Messages and Troubleshooting Tips

The following table includes the status messages generated during Testnow for HTTP and AS2. Following the table are additional troubleshooting tips to assist you in getting your trading partner profiles up and running.

Test	Outcome	Message	Explanation/Action to take
Checking Profile	Success	Profile <profile name> is active	None
	Failure	Profile <profile name> is not active	Verify profile is enabled. Enable the profile on the Trading Partner > Advanced > Profiles list or search results.
Checking Delivery Channel	Success	<delivchan_delivery_channel_name> is active	None
	Failure	<delivchan_delivery_channel_name> is not active	Verify delivery channel is enabled. Enable the channel on the Trading Partner > Advanced > Delivery Channels list or search results.
Checking Certificates	Success		None
	Failure	Certificate Information not valid	Expired certificate building outbound message. Check signing and exchange certificate used in organization profile.
	Failure	Error: decryption-failed	Receive MDN test warning (MDN received but with errors). Expired certificate when parsing MDN. Check signing and exchange certificate used in partner profile.
Checking Transport	Success	<transport_transport_name> is active	None
	Failure	<transport_transport_name> is not active	Verify the transport is enabled. Enable the transport on the Trading Partner > Advanced > Transports list or search results.

Test	Outcome	Message	Explanation/Action to take
Checking HTTPClientAdapter	Success	HTTPClientAdapter is enabled	None This verifies that the <u>default</u> HTTP Client adapter configuration is enabled.
	Failure	HTTPClientAdapter NOT enabled	Verify the HttpClientAdapter is enabled. Enable the default HTTP Client adapter configuration shipped with the application (this is the configuration used by TestNow). This indicates that the default HTTP Client adapter configuration has been disabled somehow. Go to Deployment > Services > Configuration , and list the HTTP Client adapter configurations in the system. In the results, check Enabled next to the default HTTP Client adapter configuration, which is named HTTP Client Adapter .
Checking Contracts	Success	<contract name> is active	None
	Failure	<contract name> is not active	Verify contract is enabled.

Test	Outcome	Message	Explanation/Action to take
Proxy Connection	Success	Completed successfully	None
	N/A	Not configured to use a proxy	Indicates that no proxy server was defined in the profile.
	Failure	Unknown Host	<p>Verify the host information entered in the Firewall Proxy field of the configuration, and that the format of that field is <host address – mandatory>[,<port – optional>][,<user>,<psw>]</p> <p>There are four possible values, separated by commas. The last two, if specified, are used for basic authentication.</p> <p>Examples:</p> <ul style="list-style-type: none"> ◆ localhost ◆ localhost,80 ◆ localhost,80,authuser,authpsw
	Failure	401:Unauthorized	Invalid basic proxy authentication. Check username and password used for proxy basic authentication
	Failure	Error	Check status report and the Application logs for more information. The logs are located in the logs folder beneath the Application <install_dir>. In particular, you may want to check the system.log, Perimeter.log, and httpclient.log
	Failure	Unknown host - <transport proxy adapter proxy global proxy>: <proxy name> Example: Unknown Host – transport proxy: invalid.proxy.name	Verify the proxy host specified in either the transport, adapter, or global proxy.

Test	Outcome	Message	Explanation/Action to take
SSL Connection	Success	Completed successfully	None
	N/A	Not configured to use SSL	Indicates that SSL was not selected during profile configuration.
	Failure	Unknown Host	Indicates a problem with the host information specified in the endpoint.
	Failure	SSL Handshake Failure	The profile is configured to perform SSL but could not establish an SSL connection, possible causes include: <ul style="list-style-type: none"> ◆ The server is not configured to do SSL ◆ Problem with the security credentials ◆ Problem with certificates used with SSL
	Failure	Error	Check status report and the Application logs for more information. The logs are located in the logs folder beneath the Application <install_dir>. In particular, you may want to check the system.log, Perimeter.log, and httpclient.log
	Failure	Server may require SSL	The client was not configured to perform SSL, but the server is expecting it. Verify the SSL configuration information with the host.

Test	Outcome	Message	Explanation/Action to take
HTTP Connection	Success	Completed successfully	None
	Failure	Unknown Host	Indicates a problem with the host information specified in the endpoint.
	Failure	Server may require SSL	Indicates that this profile is not configured for SSL, but that this server may require you to use SSL.
	Failure	Handshake Failure	The profile is configured to perform SSL but could not establish an SSL connection, Possible causes include: <ul style="list-style-type: none"> ◆ The server is not configured to do SSL ◆ Problem with the security credentials ◆ Problem with certificates used with SSL
	Failure	Error	Check status report for more information.
	Failure	404:Not Found	Invalid endpoint HTTP connection test. Verify endpoint specified in the transport is correct.
	Failure	Unknown host	Invalid host HTTP connection test. Verify host specified in the transport is correct.
	Failure	Error. Status report contains "Could not complete connection to specified host"	Invalid port HTTP connection test. Verify the port specified in the transport is correct.

Additional TestNow Troubleshooting Tips

If you run the TestNow option for a trading partner profile and it fails, first review the TestNow Messages table to see if the resolution is covered there. If not, here are some other possible issues and resolutions:

Problems Accessing the TestNow Option

- ◆ User cannot see the TestNow icon on the Trading Partner Profile list or AS2 Profile list screen. Verify that the user has the TestNow permissions assigned to their account.
 - a. On the Admin Console, select **Accounts > User Accounts** to see the Accounts page.
 - b. Search for the user account and click the name in the search results to see that account's settings.

- c. Check that the TestNow permission is assigned.

TestNow Business Process Won't Run

- ◆ When you invoke TestNow, the following error is displayed: “The TestNow business process is disabled”

The TestNowHTTP business process is enabled by default, but may have been disabled by another user. To resolve the issue, re-enable the business process:

- a. On the Admin Console, select **Business Processes > Manager**.
- b. Search for the TestNowHTTP business process and click **Execution Manager** for that business process in the search results list.
- c. On the Control Business Process Execution screen, check **Enable** for the business process.

HTTP Client Adapter Exception Status Report Messages

If TestNow fails at the HTTP Server Connection step with the message “HTTP Client Adapter exception,” check the information in the status report for more details, which can include the following messages:

- ◆ Error Message: HTTP Client exception: Exception while trying to construct URL from *<ip address>* with error: no protocol: *<ip address>*

Verify that the endpoint used in the profile is valid. For the HTTP connection test to complete successfully, the business process has to be able to contact the trading partner’s HTTP server. The endpoint must include the following:

- ◆ Communication protocol (in this case, it must be HTTP or HTTP/s)
- ◆ Trading partner IP address or fully qualified domain name
- ◆ Trading partner port (optional)

in this format:

HTTP://*<ip address>*:*<port>*

or

HTTP/s://*<ip address>*:*<port>*

On the Admin Console, verify that the endpoint is correct and in the correct format by selecting **Trading Partner > Setup > Advanced > Transports**, list the transports, and click **Edit** next to the desired transport. Page through the wizard and add or change the value in the endpoint field so that it is in the correct format.

- ◆ Error Message: HTTP Client exception: ResponseTimeoutSpecified [0] is out of required range between 1 and 999999 secs!

Go to **Trading Partner > Advanced > Transports**. List the transports, and select **Edit** for the transport to be corrected. Change the response timeout to a valid value (between 1 and 999999 seconds).

TestNow Runs Successfully But Production BP Fails

- ◆ A trading partner profile runs with TestNow option successfully. However, when the same profile is used in production, the business process fails.

The TestNow business processes use the default HTTP Client adapter configuration. If your production business process uses a different HTTP Client adapter configuration, check for differences between the default and your new production configurations of the adapter. You can also try running the business process using the default HTTP Client adapter configuration to help isolate the issue.