

SeeBeyond ICAN Suite

Schema Bridge User's Guide

Release 5.0.5 for Schema Run-time Environment (SRE)



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Introduction

This document describes how to install and configure the Schema Bridge.

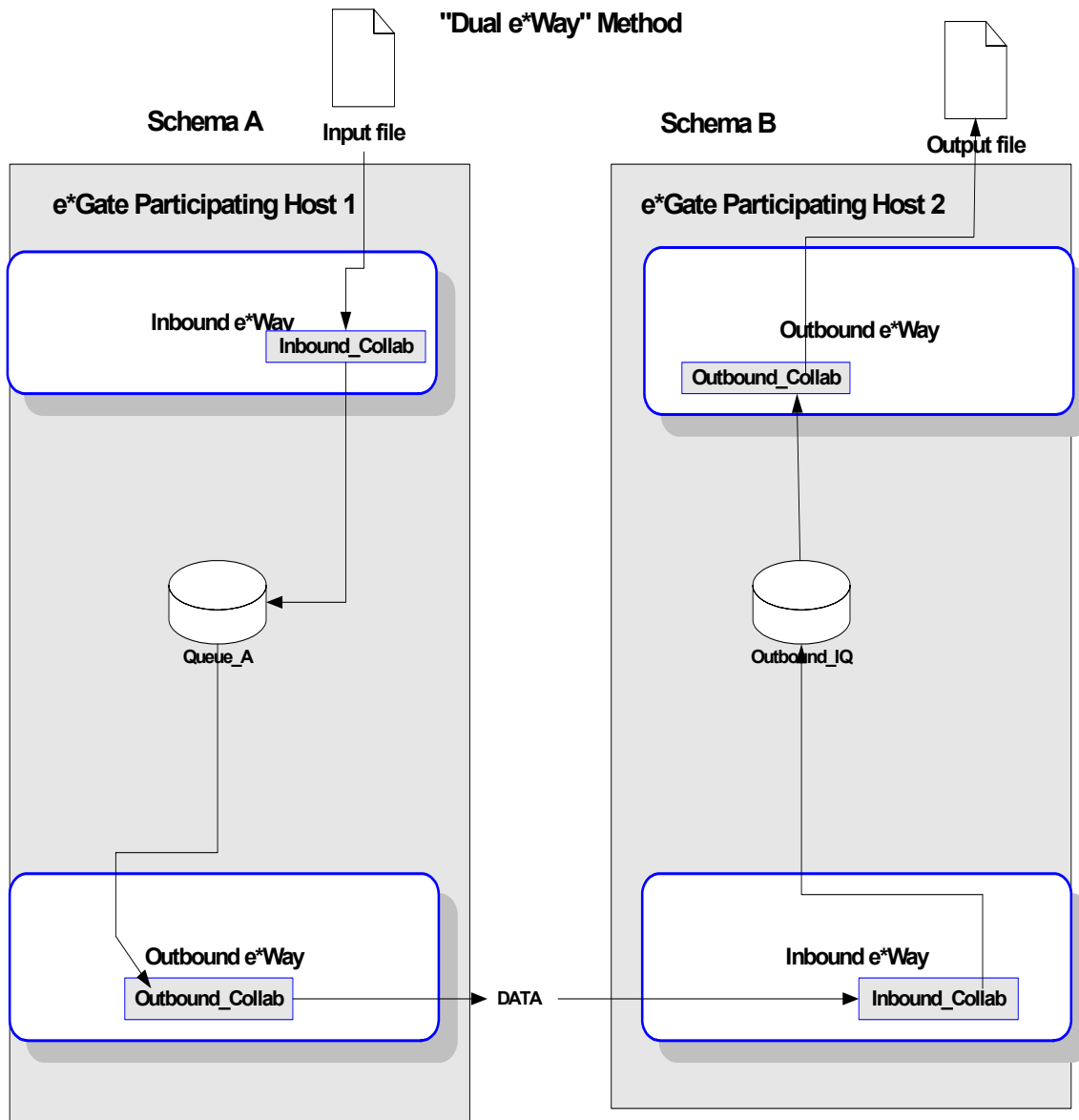
1.1 Overview

When designing an e*Gate installation, primary concern is usually given to the interconnection of basic components (e*Ways, BOBs, IQs, and so on) within a single schema. However, additional benefits may be gained by reorganizing these components into multiple schemas. For example, grouping components by function or purpose into separate schemas increases security, reduces the amount of configuration and developmental details to be managed, and enables individual development teams to concentrate their efforts on a small portion of a larger project. Any multi-schema architecture must include a means to send data from one schema to another; the Schema Bridge provides this means.

Without a Schema Bridge, data can be exchanged between schemas using a “dual e*Way” method where two separate schemas are connected using e*Ways of the same type. For example, schema A can send data to schema B using two TCP/IP e*Ways or two database-connectivity e*Ways (or any other two supported e*Ways that can both send and receive data).

Figure 1 on the following page demonstrates the “dual e*Way” method.

Figure 1 “Dual e*Way” Method



The “dual e*Way” method would require the Event to travel from the queue on Schema A to the e*Way on Schema A. Then, the Event would travel from the e*Way on Schema A to the e*Way on Schema B. Finally, the Event would travel from the e*Way on Schema B to the queue on Schema B.

The Schema Bridge provides a better solution. It acts as a simple delivery agent to allow Events to be transmitted from one schema to another via e*Gate. The Schema Bridge disburses information between schemas by sharing memory from a common Registry. However, it processes different schemas or Events on different Participating Hosts.

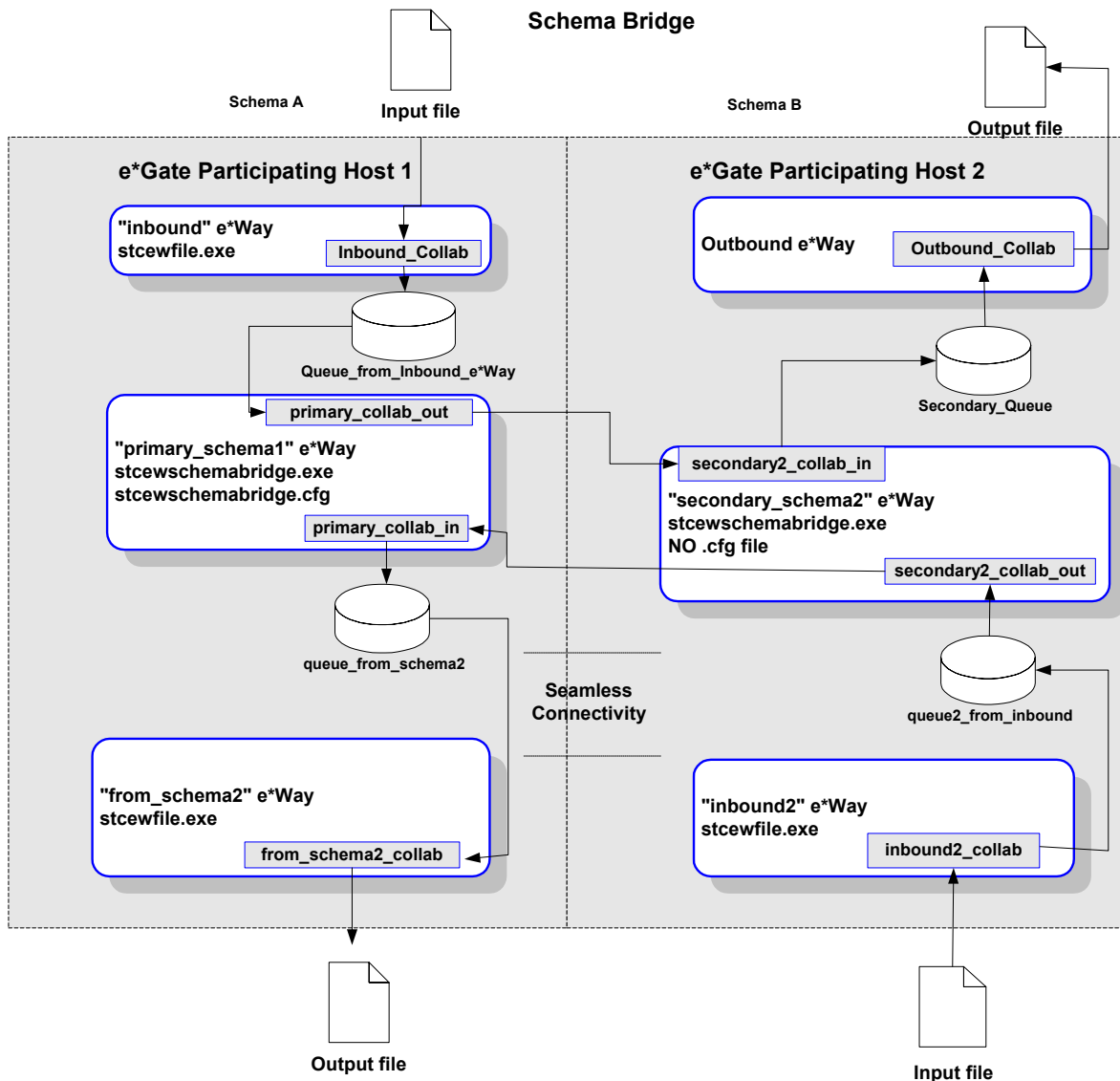
The advantages in using the Schema Bridge over the “dual e*Way” method are:

- **Simplicity:** There are no TCP/IP ports, envelopes, Acks/Nacks or other negotiations to configure. The Schema Bridge configuration parameters include only the **Foreign Schema Name** (the secondary schema) and the **Foreign Logical Name** (the logical name of the secondary schema).
- **Performance:** Although there appears to be two “complete” schemas, (a component on A, the Primary Schema, and a component on B, the Secondary Schema) there exists only one **.cfg** file between both schemas.

The Event travels directly from the queue on the Primary Schema to the queue on the Secondary Schema. For more information on implementing the Schema Bridge, see [“Creating a Test Implementation” on page 16](#).

Figure 2 on the following page demonstrates a Schema Bridge implementation.

Figure 2 Schema Bridge Method



1.2 Operational Overview

To create a functioning Schema Bridge, you must designate a primary schema that initiates the transmission of Events, and at least one secondary schema that receives the transmitted Events and that responds by returning any Events available in the queue located within the secondary schema.

Only one executable exists between the two schemas. The primary schema controls the data exchange, while the secondary schema reacts to that data exchange. The only configuration file required is the one that is associated with the primary schema, which

defines the secondary or “Foreign” schema. There is no configuration file associated with the secondary schema.

The primary schema receives data (Events) from an inbound e*Way (configured as necessary), the data is received by the Schema Bridge and forwarded to the secondary (Foreign) schema. The secondary schema can optionally be configured to receive data from an inbound e*Way and that data will be forwarded to the primary schema via shared memory. (See [Figure 2 on page 8](#) for a diagram of this configuration.)

If desired, additional secondary schemas can be used by creating another Schema Bridge e*Way within the primary schema that specifies the additional secondary schema as the Foreign Schema. The “master/slave” relationship exists between each primary and secondary schema. There is no relationship between the secondary schemas (other than that they are connected to a common primary schema).

1.3 Intended Reader

The reader of this guide is presumed to be a developer or system administrator with responsibility for maintaining the e*Gate system; to have moderate to advanced-level knowledge of Windows and/or UNIX operations and administration; and to be thoroughly familiar with Windows-style GUI operations.

1.4 Components

The Schema Bridge comprises the following:

- **stcwschemabridge.exe**, the executable component
- **stcwschemabridge.def**, the configuration file, which the e*Way Editor uses to define configuration parameters

A complete list of installed files appears in [Table 1 on page 13](#).

1.5 Supported Operating Systems

The Schema Bridge is supported on the following operating systems:

- Windows 2000 and Windows Server 2003
- HP-UX 11.0 and 11i (PA-RISC)
- Sun Solaris 8
- Japanese Windows 2000 and Windows Server 2003
- Japanese HP-UX 11.0 and 11i (PA-RISC)
- Japanese Sun Solaris 8

1.6 System Requirements

To use the Schema Bridge, you need the following:

- An e*Gate Participating Host.
- A TCP/IP network connection.
- 8 MB free disk space on both the Participating Host and Registry Host for e*Way executable, configuration, library, and script files.

Note: *Additional disk space will be required to process and queue the data that this e*Way processes; the amount necessary will vary based on the type and size of the data being processed, and any external applications performing the processing.*

Installation

This chapter describes how to install the Schema Bridge.

2.1 Windows Systems

2.1.1 Pre-installation

- 1 Exit all Windows programs before running the setup program, including any anti-virus applications.
- 2 You must have Administrator privileges to install this e*Way.

2.1.2 Installation Procedure

To install the Schema Bridge on a Windows system

- 1 Log in as an Administrator on the workstation on which you want to install the e*Way.
- 2 Insert the e*Way installation CD-ROM into the CD-ROM drive.
- 3 If the CD-ROM drive's "Autorun" feature is enabled, the setup application should launch automatically; skip ahead to step 4. Otherwise, use the Windows Explorer or the Control Panel's **Add/Remove Applications** feature to launch the file **setup.exe** on the CD-ROM drive.
- 4 The InstallShield setup application will launch. Follow the on-screen instructions to install the e*Way.

Note: *Be sure to install the e*Way files in the suggested "client" installation directory. The installation utility detects and suggests the appropriate installation directory. Unless you are directed to do so by SeeBeyond support personnel, do not change the suggested "installation directory" setting.*

- 5 After the installation is complete, exit the install utility and launch the Schema Designer.
- 6 In the Component editor, create a new e*Way.
- 7 Display the new e*Way's properties.

- 8 On the General tab, under **Executable File**, click **Find**.
- 9 Select the file **stcewschemabridge.exe**.
- 10 Click OK to close the properties sheet, or continue to configure the e*Way. Configuration parameters are discussed in **Chapter 3**.

Note: *Once you have installed and configured this e*Way, you must incorporate it into a schema by defining and associating the appropriate Collaborations, Collaboration Rules, IQs, and Event Types before this e*Way can perform its intended functions. For more information about any of these procedures, please see the online Help system.*

*For more information about configuring e*Ways or how to use the e*Way Editor, see the e*Gate Integrator User's Guide.*

2.2 UNIX Systems

2.2.1 Pre-installation

- You do not require root privileges to install this e*Way. Log in under the user name that you wish to own the e*Way files. Be sure that this user has sufficient privilege to create files in the e*Gate directory tree.

2.2.2 Installation Procedure

To install the Schema Bridge on a UNIX system

- 1 Log in on the workstation containing the CD-ROM drive, and insert the CD-ROM into the drive.
- 2 If necessary, mount the CD-ROM drive.
- 3 At the shell prompt, type
cd /cdrom
- 4 Start the installation script by typing:
setup.sh
- 5 A menu of options will appear. Select the "install e*Way" option. Then, follow any additional on-screen directions.

Note: *Be sure to install the e*Way files in the suggested "client" installation directory. The installation utility detects and suggests the appropriate installation directory. Unless you are directed to do so by SeeBeyond support personnel, do not change the suggested "installation directory" setting.*

- 6 After installation is complete, exit the installation utility and launch the Schema Designer.

- 7 In the Component editor, create a new e*Way.
- 8 Display the new e*Way's properties.
- 9 On the General tab, under **Executable File**, click **Find**.
- 10 Select the file **stcewschemabridge.exe**.
- 11 Click OK to close the properties sheet, or continue to configure the e*Way. Configuration parameters are discussed in [Chapter 3](#).

Note: *Once you have installed and configured this e*Way, you must incorporate it into a schema by defining and associating the appropriate Collaborations, Collaboration Rules, IQs, and Event Types before this e*Way can perform its intended functions. For more information about any of these procedures, please see the online Help system.*

*For more information about configuring e*Ways or how to use the e*Way Editor, see the **e*Gate Integrator User's Guide**.*

2.3 Files/Directories Created by the Installation

The Schema Bridge installation process will install the following files within the e*Gate directory tree. Files will be installed within the "egate\client" tree on the Participating Host and committed to the "default" schema on the Registry Host.

Table 1 Files created by the installation

e*Gate Directory	File(s)
bin\	stcewschemabridge.exe
configs\stcewschemabridge\	stcewschemabridge.def

Configuration

This chapter describes how to configure the Schema Bridge.

3.1 e*Way Configuration Parameters

e*Way configuration parameters are set using the e*Way Editor.

To change e*Way configuration parameters:

- 1 In the Schema Designer's Component editor, select the e*Way you want to configure and display its properties.
- 2 Under **Configuration File**, click **New** to create a new file, **Find** to select an existing configuration file, or **Edit** to edit the currently selected file.
- 3 In the **Additional Command Line Arguments** box, type any additional command line arguments that the e*Way may require, taking care to insert them *at the end* of the existing command-line string. Be careful not to change any of the default arguments unless you have a specific need to do so.

For more information about how to use the e*Way Editor, see the e*Way Editor's online Help or the *Working with e*Ways* user's guide.

The e*Way's configuration parameters are organized into a single "General Settings" section.

3.1.1 General Settings

The General Settings control the basic operational parameters.

Foreign Schema Name

Description

Specifies the name of the secondary schema that will receive the data sent.

Required Values

A valid schema name. This parameter is *required* and must not be left blank. Ensure that the Foreign Schema Name matches case with the actual schema name.

Foreign Logical Name

Description

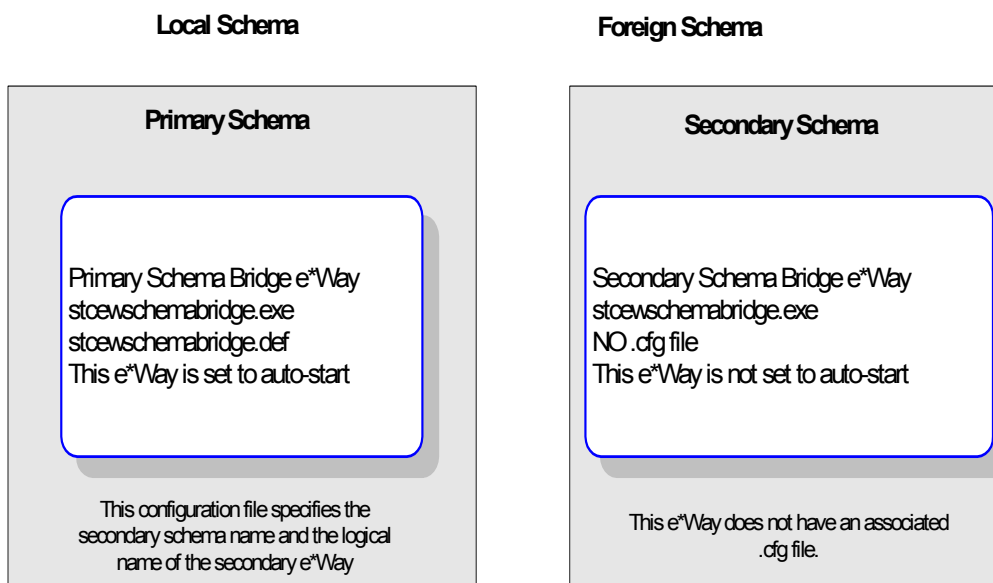
Specifies the logical name of the foreign “half” of this e*Way. This is the logical name of the schema that receives the data sent.

Required Values

A valid logical name. Ensure that the Foreign Logical Name matches case with the actual logical name of the module.

See Figure 3 below for more information.

Figure 3 Schema Bridge configuration



Implementation

This chapter includes information pertinent to implementing the Schema Bridge in a production environment.

4.1 Implementation Notes

Once the e*Way has been installed, the schema that will initiate data delivery *must* be set to **autostart**, and the **Foreign** schema *must not* be set to **autostart**.

It is recommended that all Schema Bridge e*Ways use the “Pass Through” Collaboration Service; do not use Monk functionality to perform any data transformations.

Since the primary and secondary schemas “share” memory, it is mandatory that all names defined are unique, such as schema names, Event Types, Collaboration Rules.

4.2 Creating a Test Implementation

Before attempting to test the Schema Bridge, verify that the following files are present in the suggested directories on any host machine you plan to test the product:

e*Gate Directory	File(s)
client\bin	stcewschemabridge.exe
configs\stcewschemabridge	stcewschemabridge.def

4.2.1 Creating a Scenario with Participating Hosts on the Same Platform

Create two schemas as defined below. Then, test the schemas with the data in [“Creating Sample Data for the Schema 1” on page 23](#) and [“Creating Sample Data for](#)

[the Schema 2" on page 23](#). The instructions for Schema 1 follow immediately. See ["Schema 2" on page 20](#) for instructions for creating the second schema.

Schema 1

Note: For more information about creating or modifying any component within the e*Gate Schema Designer, see the Schema Designer's Help system.

- 1 Log into the e*Gate Schema Designer and click **New** to create a new schema. Name the schema "primary_schema1".

The Schema Designer main screen appears.

- 2 If the Navigator's **Components** tab is not selected already, select it now.
- 3 Rename the CB (Control Broker) "localhost_cb" .

Note: Each component in the connected schemas must have a unique name.

- 4 Rename the IQ Manager "localhost_iqmgr".

Note: The default port numbers must be unique to each "half" of the Schema Bridge.

- 5 Create an Event Type named "ev1".
- 6 Display the properties of the **ev1** Event Type. Then, use the **Find** button, navigate to the "**common**" folder to assign the file **GenericInEvent.ssc**.
- 7 Create a Collaboration Rule named "ev1_to_ev1".
- 8 Edit the Properties of this Collaboration Rule as follows:

Service	Pass Through
Subscription	ev1 (the Event Type defined in Step 5 above)
Publication	ev1 (Event Type defined in Step 5 above)

- 9 Create two IQs, named "queue_from_inbound_eway" and "queue_from_schema2".
- 10 Create an e*Way named "Inbound".
- 11 Display the e*Way's properties. Then, use the **Find** button to assign the file **stcewfile.exe**.
- 12 Select the **Start Up** tab, check the **Start automatically** box.

The next part of the procedure requires that you launch the e*Way editor and define the file-based e*Way's properties.

- 1 With the e*Way's Properties Dialog box still displayed, click **New** to launch the e*Way Editor.
- 2 Using the e*Way Editor, configure the following settings:

Section	Parameter and setting
General Settings	AllowIncoming: Yes AllowOutgoing: No
Poller (Inbound) Settings	Poll Directory: C:\INDATA\schemal(or other "appropriate" directory) Input File Mask: *.dat

- 3 Save the settings, promote to run time and exit the e*Way Editor.
- 4 When you return to the e*Way's Properties Dialog box, click **OK** to save all changes and return to the Schema Designer's main window.

Next, create a Collaboration for the Inbound e*Way.

- 1 Open the **Inbound** e*Way and create a Collaboration named "Inbound_collab".
- 2 Set the Collaboration's properties as follows:

Collaboration Rule	ev1_to_ev1 (Pass through)
Subscriptions	Event: ev1 Source: <External> .
Publications	Event: ev2 Publish to: queue_from_inbound_eway .

Now that the "Inbound" e*Way is completely configured, you must create a Schema Bridge e*Way.

- 1 Create a new e*Way component named "primary_schema1".
- 2 Display the e*Way's properties. Then, use the **Find** button to assign the file **stcwschemabridge.exe**.
- 3 Select the **Start Up** tab, check the **Start automatically** box.
- 4 Click **New** to launch the e*Way Editor.
- 5 Use the e*Way Editor to define the following parameters:

Section	Parameter and Settings
General Settings	Foreign Schema Name: secondary_schema2 Foreign Logical Name: secondary2

- 6 Save the settings, promote to run time and exit the e*Way Editor.
- 7 When you return to the e*Way's Properties Dialog box, click **OK** to save all changes and return to the Schema Designer's main window.

Next, create the Collaboration for the Schema Bridge e*Way.

- 1 Select the **primary_to_schema2** component and create a Collaboration named "primary1_collab_out".
- 2 Assign the following properties to the Collaboration:

Collaboration Rules ev1_to_ev1
 Subscriptions Event: ev1
 Source: Inbound_collab
 Publications Event: ev1
 Publish to: <External>

- 3 Create a second Collaboration for the **primary_to_schema2** e*Way, naming it “primary1_collab_in”.
- 4 Assign the following properties to the Collaboration:

Collaboration Rules ev1_to_ev1
 Subscriptions Event: ev1
 Source: <External>
 Publications Event: ev2
 Publish to: queue_from_schema2

Now create and configure the final e*Way component.

- 1 Create a new e*Way named “from_schema2”.
- 2 Display the e*Way’s properties. Then, use the **Find** button to assign the file **stcewfile.exe**.
- 3 Select the **Start Up** tab, check the **Start automatically** box.
- 4 With the e*Way’s Properties Dialog box still displayed, click **New** to launch the e*Way Editor.
- 5 Using the e*Way Editor, configure the following settings:

Section	Parameter and setting
General Settings	AllowIncoming: No AllowOutgoing: Yes
Outbound (send) Settings	Output directory: C:\DATA\schema1(or other “appropriate” directory) Output File Name: schema2.txt

- 6 Save the settings, promote to run time and exit the e*Way Editor.
- 7 When you return to the e*Way’s Properties Dialog box, click **OK** to save all changes and return to the Schema Designer’s main window.
- 8 Create a Collaboration for the “from_schema2” e*Way, naming it “from_schema2_collab”.
- 9 Set the Collaboration’s properties as follows:

Collaboration Rules: **ev1_to_ev1 (Pass through)**
 Subscriptions **Event:** ev1
 Source: Primary1_collab_in

Publications **Event:** ev1
 Publish to: <External>

Schema 2

- 1 Log into the e*Gate Schema Designer and click **New** to create a new schema. Name the schema "secondary_schema2".

The Schema Designer main screen appears.

- 2 If the Navigator's **Components** tab is not selected already, select it now.
- 3 Rename the CB (Control Broker) "localhost2_cb".

Note: Each component in the connected schemas must have a unique name.

- 4 Rename the IQ Manager "localhost2_iqmgr".

Note: The default port numbers must be unique to each "half" of the Schema Bridge.

- 5 Create an Event Type named "ev2".
- 6 Display the properties of the **ev2** Event Type. Then, use the **Find** button, navigate to the "**common**" folder to assign the file **GenericInEvent.ssc**.
- 7 Create a Collaboration Rule named "ev2_to_ev2".
- 8 Edit the Properties of this Collaboration Rule as follows:

Service	Pass Through
Subscription	ev2 (the Event Type defined in Step 5 above)
Publication	ev2 (Event Type defined in Step 5 above)

- 9 Create two IQs, named "queue2" and "queue2_from_inbound2".
- 10 Create an e*Way named "inbound2".
- 11 Display the e*Way's properties. Then, use the **Find** button to assign the file **stcewfile.exe**.
- 12 Select the **Start Up** tab, check the **Start automatically** box.

The next part of the procedure requires that you launch the e*Way editor and define the file-based e*Way's properties.

- 1 With the e*Way's Properties Dialog box still displayed, click **New** to launch the e*Way Editor.
- 2 Using the e*Way Editor, configure the following settings:

Section	Parameter and setting
General Settings	AllowIncoming: Yes AllowOutgoing: No

Section	Parameter and setting
Poller (Inbound) Settings	Poll Directory: C:\INDATA\schemata2(or other “appropriate” directory) Input File Mask: *.dat

- 3 Save the settings, promote to run time and exit the e*Way Editor.
- 4 When you return to the e*Way’s Properties Dialog box, click **OK** to save all changes and return to the Schema Designer’s main window.

Next, create a Collaboration for the Inbound e*Way.

- 1 Open the **inbound2** e*Way and create a Collaboration named “inbound2_collab”.
- 2 Set the Collaboration’s properties as follows:

Collaboration Rule	ev2_to_ev2 (Pass through)
Subscriptions	Event: ev2 Source: <External> .
Publications	Event: ev2 Publish to: queue2_from_inbound2 .

Now that the “inbound2” e*Way is completely configured, you must create a Schema Bridge e*Way.

- 1 Create a new e*Way component named “secondary2”.
- 2 Display the e*Way’s properties. Then, use the **Find** button to assign the file **stcwschemabridge.exe**.
- 3 Do **not** select the **Start Up** tab, do **not** check the **Start automatically** box.
- 4 Do not click **New** to launch the e*Way Editor.

Note: The secondary component of the Schema Bridge does not have a .cfg file.

- 5 Click **OK** to save all changes and return to the Schema Designer’s main window.

Next, create the Collaboration for the Schema Bridge e*Way.

- 1 Select the **secondary2** e*Way component and create a Collaboration named “secondary2_collab_in”.
- 2 Assign the following properties to the Collaboration:

Collaboration Rule	ev2_to_ev2 (Pass through)
Subscriptions	Event: ev2 Source: <External> .
Publications	Event: ev2 Publish to: queue2 .

- 3 Create a second Collaboration for the **secondary2**, naming it “secondary2_collab_out”.

4 Assign the following properties to the Collaboration:

Collaboration Rule	ev2_to_ev2 (Pass through)
Subscriptions	Event: ev2 Source: inbound2_coll .
Publications	Event: ev2 Publish to: <External> .

Now create and configure the final e*Way component.

- 1 Create a new e*Way named “outbound2”.
- 2 Display the e*Way’s properties. Then, use the **Find** button to assign the file **stcewfile.exe**.
- 3 Select the **Start Up** tab, check the **Start automatically** box.
- 4 With the e*Way’s Properties Dialog box still displayed, click **New** to launch the e*Way Editor.
- 5 Using the e*Way Editor, configuration the following settings:

Section	Parameter and setting
General Settings	AllowIncoming: No AllowOutgoing: Yes
Outbound (send) Settings	Output directory: C:\DATA\schema2(or other “appropriate” directory) Output File Name: schema1.txt

- 6 Save the settings, promote to run time and exit the e*Way Editor.
- 7 When you return to the e*Way’s Properties Dialog box, click **OK** to save all changes and return to the Schema Designer’s main window.
- 8 Create a Collaboration for the “outbound2” e*Way, naming it “outbound_collab”.
- 9 Set the Collaboration’s properties as follows:

Collaboration Rules:	ev2_to_ev2 (Pass through)
Subscriptions	Event: In Source: secondary2_collab_in
Publications	Event: In Publish to: <External>

The Schema Designer configuration is now complete. Now, you must create some test data which will be sent from Schema1 to Schema2. The results of these requests will be saved to the output data file.

Creating Sample Data for the Schema 1

To pass data from the primary schema to the secondary schema, generate a data file that contains 25 sequentially numbered records. The script below shows an example.

```
0, 'String length15', 'STR', 0, 'F', 0, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
1, 'String length15', 'STR', 1, 'F', 1, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
2, 'String length15', 'STR', 2, 'F', 2, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
3, 'String length15', 'STR', 3, 'F', 3, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
4, 'String length15', 'STR', 4, 'F', 4, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
5, 'String length15', 'STR', 5, 'F', 5, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
6, 'String length15', 'STR', 6, 'F', 6, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
7, 'String length15', 'STR', 7, 'F', 7, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
8, 'String length15', 'STR', 8, 'F', 8, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
9, 'String length15', 'STR', 9, 'F', 9, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
10, 'String length15', 'STR', 10, 'F', 10, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
11, 'String length15', 'STR', 11, 'F', 11, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
12, 'String length15', 'STR', 12, 'F', 12, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
13, 'String length15', 'STR', 13, 'F', 13, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
14, 'String length15', 'STR', 14, 'F', 14, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
15, 'String length15', 'STR', 15, 'F', 15, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
16, 'String length15', 'STR', 16, 'F', 16, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
17, 'String length15', 'STR', 17, 'F', 17, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
18, 'String length15', 'STR', 18, 'F', 18, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
19, 'String length15', 'STR', 19, 'F', 19, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
20, 'String length15', 'STR', 20, 'F', 20, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
21, 'String length15', 'STR', 21, 'F', 21, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
22, 'String length15', 'STR', 22, 'F', 22, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
23, 'String length15', 'STR', 23, 'F', 23, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
24, 'String length15', 'STR', 24, 'F', 24, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
25, 'String length15', 'STR', 25, 'F', 25, 'String length15', 'LEN1', 'STRING', 'STRING', 'Length 10 ', 'LEN1'
```

Creating Sample Data for the Schema 2

To return data from the secondary schema to the primary schema, generate a data file that contains 10 sequentially numbered records. The script below shows an example.

```
This is test of one
This is test of two
This is test of three
This is test of four
This is test of five
This is test of six
This is test of seven
This is test of eight
This is test of nine
This is test of ten
```

Debug Settings

For any Schema Bridge e*Way, set the Trace level logging to the following debug settings:

- Monk
- Message
- Eway
- Monk Verbose
- Message Verbose
- Eway Verbose

Additional Notes

For Schema 1, the Schema Bridge e*Way must be set to auto-start.

For Schema 2, the Schema Bridge should not be set to auto-start.

Running the Sample scenario

To run the sample scenario, create a batch script to execute the following commands to start the Control Broker, or execute each command individually. A batch file becomes especially helpful when the number of secondary schemas increase.

```
stccb -rh localhost -rs primary_schema1 -un Administrator -up password -ln localhost_cb  
stccb -rh localhost -rs secondary_schema2 -un Administrator -up password -ln localhost2_cb
```

localhost: the actual local host the schema is running on.

primary_schema1/secondary_schema2: the name of the schema to start.

Administrator: the username

password: the password for the above mentioned username

localhost_cb/localhost_cb2: the name of the localhost_cb within the defined schema

Expected output

Under the directory specified as the output file directory within the configuration file of the outgoing e*Way, the following folders should be created:

Schema1

Schema2

The output data files for Schema2 should contain all the records from the input file for the inbound e*Way associated with Schema 1.

The output data file for Schema 1 should contain all the data from the input file for the inbound e*Way associated with Schema 2.

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