

# How to Configure the Harford Email Routing Connector

By Gang Zhong, Esri

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These instructions assume GeoEvent Processor is installed in the C:\Program Files\ArcGIS\Server\GeoEventProcessor folder.

1. Copy the sample-transport-10.2.2.jar to C:\Program Files\ArcGIS\Server\GeoEventProcessor\deploy.
2. Restart the "ArcGIS GeoEvent Processor" Windows Service.
3. Open ArcGIS GeoEvent Processor Manager to create a connector.  
(Site->GeoEvent Processor->Connectors->Create Connector).
4. Enter the desired *Name*, *Label*, and *Default Input Name*.
  - a. Choose *Adaptor* as "Text".
  - b. Choose *Transport* as "SampleInboundTransport".
5. In "Configure Properties"
  - a. Select "Mail IMAPs Port", "Mail Store Protocol", "Mail Host", "Mail User", "Mail Password", "Seconds to Read Mail" and "Read Mail From This Subfolder" from "Shown Properties" and move them into "Advanced Properties".
  - b. Click "Create" to create the new connector.

The screenshot shows the 'ArcGIS GeoEvent Processor Manager' window with the 'Site' tab selected. The 'Creating New Connector' dialog is open, showing the following configuration:

- Name:** emailRouteConnector
- Label:** emailRouteConnector
- Description:** (empty)
- Type:** Input (selected)
- Adapter:** Text
- Transport:** SampleInboundTransport
- Default Input Name:** emailRouteConnector

Below the configuration fields is the 'Configure Properties' section, which is divided into three panes:

- Shown Properties:** A list of available properties including 'Create Unrecognized Event Definitions', 'Message Separator', 'Attribute Separator', 'Incoming Data Contains GeoEvent Definition', 'Create Fixed GeoEvent Definitions', 'GeoEvent Definition Name (New)', 'GeoEvent Definition Name (Existing)', 'Build Geometry From Fields', 'X Geometry Field', 'Y Geometry Field', 'Z Geometry Field', 'wkid Geometry Field', 'Well Known Text Geometry Field', 'Expected Date Format', 'Event Size', and 'Events Per Second'.
- Advanced Properties:** A list of properties that have been moved from the 'Shown Properties' list. These include 'Mail IMAPs Port', 'Mail Store Protocol', 'Mail Host', 'Mail User', 'Mail Password', 'Seconds to Read Mail', and 'Read Mail From This Subfolder'.
- Hidden Properties:** A list of properties that are currently hidden.

Buttons for 'Create' and 'Cancel' are located at the top right of the dialog.

6. Create a new GeoEvent Definition
  - a. Create a new geoevent denifition with the name of "GeoEventDef"
  - b. The GeoEventDef has thirteen fields as below
  - c. The last field is the "Geometry" field with "Geometry" Type and Tags
  - d. Make sure the Lat and Long fields having "Double" type

The screenshot shows the ArcGIS GeoEvent Processor Manager interface. The 'GeoEvent Processor' tab is active, and the 'Settings' sub-tab is selected. The 'GeoEvent Definition Name' is set to 'GeoEventDef' and the 'Owner Name' is 'arcgis'. Below this, the 'Fields for GeoEventDef' section contains a table with 13 fields. The fields are: MessageType (String), ReceivedTime (String), ReceivedDate (String), RequestID (String), Lat (Double), Long (Double), Town (String), Address (String), Street (String), NearestStreet (String), StartDate (String), StartTime (String), and Geometry (Geometry). Each field has a cardinality of 1. The 'Geometry' field has a tag of 'GEOMETRY'. There are 'New Field' and 'Reorder Fields' buttons above the table. The table has edit and delete icons for each row.

Name	Type	Cardinality	Tags
MessageType	String	1	
ReceivedTime	String	1	
ReceivedDate	String	1	
RequestID	String	1	
Lat	Double	1	
Long	Double	1	
Town	String	1	
Address	String	1	
Street	String	1	
NearestStreet	String	1	
StartDate	String	1	
StartTime	String	1	
Geometry	Geometry	1	GEOMETRY

7. Click "Inputs" tab to "Add Input" and select the custom connector you defined. (Services->Inputs->Add Inputs).
  - a. Input your Name
  - b. Select "Incoming Data Contains GeoEvent Definition" as "No"
  - c. Select "Create Fixed GeoEvent Definitions" as "Yes"
  - d. Input "GeoEvent Definition Name (New)" as your created GeoEvent Definition name such as "GeoEventDef"
  - e. Select "Build Geometry From Fields" as "Yes"; Input "X Geometry Field:" as "Long" and "Y Geometry Field:" as "Lat"
  - f. Expand "Advanced" tab and you can configure the customized parameters here.

**ArcGIS GeoEvent Processor Manager** Services Site Security Logs

**Monitor** **Inputs** **GeoEvent Services** **Outputs**

**Creating Input - Receive IMAP** Save Cancel

Name\*:

Message Separator:

Attribute Separator\*:

Incoming Data Contains GeoEvent Definition: ☐ Yes ☒ No

Create Fixed GeoEvent Definitions: ☐ Yes ☒ No

GeoEvent Definition Name (Existing):

Build Geometry From Fields: ☒ Yes ☐ No

X Geometry Field:

Y Geometry Field:

Z Geometry Field:

wkid Geometry Field:

Well Known Text Geometry Field:

Expected Date Format:

Event Size\*:

Events Per Second\*:

**Advanced**

Mail IMAPs Port\*:

Mail Store Protocol\*:

Mail Host\*:

Mail User\*:

Mail Password\*:

Seconds to Read Mail\*:

Read Mail From This Subfolder\*:

g. Change the advanced configuration in the red box:

For example:

Define which email subfolder you will read out the emails. The format is INBOX/yourSubFolderName;

Define *Seconds to Read Email* parameter. If you want to read emails every 10 minutes, input 600 to "*Seconds to Read Email*".

Click "Save".

8. Log system
  - a. Please go to C:\Program Files\ArcGIS\Server\GeoEventProcessor\data\log\karaf.log and check the log information.
  - b. There are 2 levels of logs in this connector:
  - c. INFO and ERROR. The connector will log the parsed GeoEvents (that is the email bodies of text format) as INFO. If any error happened such as IOException, it will log at ERROR level.
  - d. You can configure C:\Program Files\ArcGIS\Server\GeoEventProcessor\etc\org.ops4j.pax.logging for the log level display, logout format and size of log file, etc.

## Appendix A:

Example of the log in karaf.log:

2014-10-14 00:24:08,626 | INFO | Thread-192 | SampleInboundTransport | 369 -  
sample.gep.sample-transport - 10.2.2 | No messages found.

2014-10-14 00:25:08,629 | INFO | Thread-192 | SampleInboundTransport | 369 -  
sample.gep.sample-transport - 10.2.2 | ++++++ Email read started

2014-10-14 00:25:09,329 | INFO | Thread-192 | SampleInboundTransport | 369 -  
sample.gep.sample-transport - 10.2.2 | No messages found.

2014-10-14 00:26:09,332 | INFO | Thread-192 | SampleInboundTransport | 369 -  
sample.gep.sample-transport - 10.2.2 | ++++++ Email read started

2014-10-14 00:26:10,255 | INFO | Thread-192 | SampleInboundTransport | 369 -  
sample.gep.sample-transport - 10.2.2 | 2 emails are read out to GeoEvent channel

2014-10-14 00:26:10,256 | INFO | Thread-192 | SampleInboundTransport | 369 -  
sample.gep.sample-transport - 10.2.2 | Parsed Mail bodies:

ROUTINE,16:07,09/22/2014,20143901024,41.7671994,-72.6880038,HARTFORD,51,FLOWER  
ST,FARMINGTON AVE,VARIOUS LOCATIONS TO REPLACE SIDEWALKS INSIDE AETNA COMPLEX.  
THESE ARE LOCATED BEHIND THE MAIN BLD THE WALK THAT GOES FROM NEW PK GARAGE TO  
BLD.,09/25/2014,07:00

ROUTINE,16:07,09/22/2014,20143901024,41.7671994,-72.6880038,HARTFORD,51,FLOWER  
ST,FARMINGTON AVE,VARIOUS LOCATIONS TO REPLACE SIDEWALKS INSIDE AETNA COMPLEX.  
THESE ARE LOCATED BEHIND THE MAIN BLD THE WALK THAT GOES FROM NEW PK GARAGE TO  
BLD.,09/25/2014,07:00

2014-10-14 00:26:10,277 | ERROR | nagement Thread. | TcpOutboundTransport | 250 -  
com.esri.ges.framework.transport.tcp-transport - 10.2.2 | Error writing to the client  
localhost:5570.

java.io.IOException: An existing connection was forcibly closed by the remote host

at sun.nio.ch.SocketDispatcher.write0(Native Method)[:1.7.0\_51]

at sun.nio.ch.SocketDispatcher.write(Unknown Source)[:1.7.0\_51]

at sun.nio.ch.IOUtil.writeFromNativeBuffer(Unknown Source)[:1.7.0\_51]

at sun.nio.ch.IOUtil.write(Unknown Source)[:1.7.0\_51]

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    at sun.nio.ch.SocketChannelImpl.write(Unknown Source)[:1.7.0_51]

    at
com.esri.ges.transport.tcp.TcpOutboundTransport.processSelectionKey(TcpOutboundTransport
.java:244)[250:com.esri.ges.framework.transport.tcp-transport:10.2.2]

    at
com.esri.ges.transport.tcp.TcpOutboundTransport.manageSelector(TcpOutboundTransport.jav
a:200)[250:com.esri.ges.framework.transport.tcp-transport:10.2.2]

    at
com.esri.ges.transport.tcp.TcpOutboundTransport.manageAllSockets(TcpOutboundTransport.ja
va:110)[250:com.esri.ges.framework.transport.tcp-transport:10.2.2]

    at
com.esri.ges.transport.tcp.TcpOutboundTransport.run(TcpOutboundTransport.java:353)[250:c
om.esri.ges.framework.transport.tcp-transport:10.2.2]

    at java.lang.Thread.run(Unknown Source)[:1.7.0_51]

2014-10-14 00:27:10,262 | INFO | Thread-192 | SampleInboundTransport | 369 -
sample.gep.sample-transport - 10.2.2 | ++++++ Email read started

2014-10-14 00:27:10,746 | INFO | Thread-192 | SampleInboundTransport | 369 -
sample.gep.sample-transport - 10.2.2 | 1 emails are read out to GeoEvent channel

2014-10-14 00:27:10,746 | INFO | Thread-192 | SampleInboundTransport | 369 -
sample.gep.sample-transport - 10.2.2 | Parsed Mail bodies:
ROUTINE,16:07,09/22/2014,20143901024,41.7671994,-72.6880038,HARTFORD,51,FLOWER
ST,FARMINGTON AVE,VARIOUS LOCATIONS TO REPLACE SIDEWALKS INSIDE AETNA COMPLEX.
THESE ARE LOCATED BEHIND THE MAIN BLD THE WALK THAT GOES FROM NEW PK GARAGE TO
BLD.,09/25/2014,07:00

```