

Sterling B2B Integrator



Connect:Enterprise Services and Adapters

Version 5.2

Sterling B2B Integrator



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Note

Before using this information and the product it supports, read the information in "Notices" on page 31.

Copyright

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Connect:Enterprise Services and Adapters

This section contains the services and adapters used for interoperability between IBM® Sterling B2B Integrator and IBM Sterling Connect:Enterprise®.

Connect:Enterprise for UNIX Server Add Service

How the Sterling Connect:Enterprise UNIX Server Add Service Works

About this task

The following describes what happens when this service is used to add a business document to a IBM Sterling Connect:Enterprise for UNIX mailbox as the result of an unsolicited remote connect.

Procedure

1. The Application business process initiates a communication session with Sterling Connect:Enterprise for UNIX through the Sterling Connect:Enterprise for UNIX Server Adapter. The adapter submits a user ID and password to gain access.
2. The adapter returns a CEUSessionId to the Begin Session service. The CEUSessionId is put in the process data.
3. Application adds a batch to a specific mailbox using the Sterling Connect:Enterprise UNIX Server Add service. This service works through the Connect:Enterprise UNIX Server Adapter to accomplish the add. Included in the transfer are: CEUMailboxId, CEUBatchId, and the file being transferred.
4. Sterling Connect:Enterprise for UNIX stores the data in the mailbox and returns a notification to the adapter indicating that the data was transferred successfully. The notification includes the batch number Sterling Connect:Enterprise for UNIX assigned to the file and the creation date.
5. A flag ("J" flag) is set on the batch in Sterling Connect:Enterprise for UNIX to indicate that Application added the batch.
6. Application sets the correlations between the business process that initiated the request and batch summary data from Sterling Connect:Enterprise for UNIX. These include: CEUBatchId, CEUMailboxId, CEUBatchNumber, schedule definition name and CEUSessionId. These correlations allow subsequent searches for this information using the Advanced Search function.

Implementing the Sterling Connect:Enterprise UNIX Server Add Service

About this task

Before implementing any specific Sterling Connect:Enterprise for UNIX Server services, outline the business tasks to be completed between Sterling Connect:Enterprise for UNIX and Application, and decide which Sterling Connect:Enterprise for UNIX Server services are needed.

To implement the Sterling Connect:Enterprise UNIX Server Add service, complete the following tasks:

Procedure

1. Configure the Connect:Enterprise UNIX Server Adapter to be used with this service. For information, see Connect:Enterprise UNIX Server Adapter.
2. Configure the pre-installed copy of the service. For information, see Configuring the Sterling Connect:Enterprise UNIX Server Add Service.
3. Use the Connect:Enterprise UNIX Server Add Service in a business process.

Configuring the Sterling Connect:Enterprise UNIX Server Add Service

To configure the Sterling Connect:Enterprise UNIX Server Add service, you must specify field settings in Application and in the GPM.

Application Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Add service:

Note: The field names in parentheses represent the corresponding field names in the GPM. This information is provided for your reference.

Field	Description
Name	Unique and meaningful name for the service configuration. Required.
Description	Meaningful description for the service configuration, for reference purposes. Required.
Select a Group	Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are: <ul style="list-style-type: none">• None – You do not want to include this configuration in a group at this time (default)• Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration.• Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. For more information about service groups see Managing Services and Adapters.
CEU Server Adapter Instance Name (CEUServerAdapterInstanceName)	The instance of the Connect:Enterprise UNIX Server Adapter that the Add service should use. The preconfigured service uses the preconfigured adapter named CEU Server Adapter BP.

GPM Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Add service in the GPM:

Field	Description
Config	Name of the service configuration. Required.
CEUBatchId	<p>The name to be assigned to the batch when it is placed in the Sterling Connect:Enterprise for UNIX repository.</p> <p>The primary document name is used if no name is specified.</p>
CEUDataFormat	<p>Sets the data format flag: ASCII, BINARY, EBCDIC.</p> <p>In an auto connect scenario, Sterling Connect:Enterprise for UNIX supplies this flag in the process data within the schedule definition: ACD_INFO/PutOptions.</p> <p>In a remote connect scenario, Sterling Connect:Enterprise for UNIX can use the Put Option defined in the remote account (RSD).</p> <p>Optional.</p> <ul style="list-style-type: none"> • If not specified, Sterling Connect:Enterprise for UNIX uses the Put Option defined in the schedule (ACD_INFO) or in the remote account (RSD). • Default - C (Collected), J (BP protocol flag), Y (binary data format) • If specified, overrides the Sterling Connect:Enterprise for UNIX Put Option.
CEUMailboxId	The ID of the Sterling Connect:Enterprise for UNIX mailbox that is to receive the document. The document is added to the mailbox for the account name if no CEUMailboxId is specified.

Field	Description
CEUProcessOption	<p>Sets the extract and transmit process option flag. Valid values are:</p> <ul style="list-style-type: none"> • Extract never, transmit once (N flag) <p>PutOptions; TO=YES</p> <p>CEUProcessOption; "Unextractable"</p> <ul style="list-style-type: none"> • Extract once, transmit never (U flag) <p>PutOptions; EO=YES</p> <p>CEUProcessOption; "Nontransmittable"</p> <ul style="list-style-type: none"> • Extract repeatedly, transmit never • Has no effect • Extract repeatedly, transmit once (R flag) <p>PutOptions; XMIT=YES</p> <p>CEUProcessOption; "Requestable"</p> <ul style="list-style-type: none"> • Extract repeatedly, transmit repeatedly (M flag) <p>PutOptions; MULTXMIT=YES</p> <p>CEUProcessOption; "Multi-transmit"</p> <p>In an auto connect scenario, Sterling Connect:Enterprise for UNIX supplies this flag in the process data within the schedule definition: ACD_INFO/PutOptions.</p> <p>In a remote connect scenario, Sterling Connect:Enterprise for UNIX can use the Put Option defined in the remote account (RSD).</p> <p>Optional.</p> <ul style="list-style-type: none"> • If not specified, Sterling Connect:Enterprise for UNIX uses the Put Option defined in the schedule (ACD_INFO) or in the remote account (RSD). • Default - C (Collected), J (BP protocol flag), Y (binary data format) • If specified, overrides the Sterling Connect:Enterprise for UNIX Put Option.
CEUServerAdapterInstanceName	Normally, this is already defined.
CEUTriggerAutoConnect	Indicates that a schedule session should be triggered when the batch is added to the Sterling Connect:Enterprise for UNIX mailbox.
GISDocumentId	If the primary document is not the document to be added, then identify the Application document ID to be added as a Sterling Connect:Enterprise for UNIX batch.

Output from Service to Business Process

The following table describes the information that is placed in process data by the Sterling Connect:Enterprise UNIX Server Add service (Message From Service):

Parameter	Description
CEUBatchNumber	The Unique batch identifier within Sterling Connect:Enterprise for UNIX. In conjunction with the creation date, batches can be uniquely identified within Sterling Connect:Enterprise for UNIX.
CEUBatchDateTime	The creation date of the batch. Format: 'yyyyMMdd'T'hhmm'
CEUMailboxId	The Sterling Connect:Enterprise for UNIX Mailboxes to which the document was added.
CEUBatchId	The name to be assigned to the new Sterling Connect:Enterprise for UNIX batch.
CEUProcessFlagStatus	The process flags as reported by Sterling Connect:Enterprise for UNIX after the batch is added to the mailbox. C (Collected), R, J (Added by Application), and Y (binary)
GISDocumentId	The Application document ID added to the Sterling Connect:Enterprise for UNIX mailbox.
CEUBatchSize	Size of batch in bytes.
CEUTriggerAutoconnect	Indicates if a schedule session is triggered when the batch is added to the mailbox.
CEUSessionId	The Sterling Connect:Enterprise for UNIX session ID associated with this activity.

Business Process Example

The following example illustrates a small part of the BPML that utilizes the Sterling Connect:Enterprise UNIX Server Add service.

```
<!-- Add Msg to Acme mailbox -->
  <operation name="CEU Server Add Service Add Service">
    <participant name="CEUServerAdd"/>
    <output message="AddRequest">
      >
        <assign to="CEUMailboxId">Invoice</assign>
        <assign to="CEUBatchId">MessageName</assign>
        <assign to="CEUTriggerAutoConnect">Yes</assign>
      </output>
    <input message="inmsg">
      <assign to="MessagefromService" from="*"></assign>
    </input>
  </operation>
```

Connect:Enterprise for UNIX Server Batch Status Service

How the Sterling Connect:Enterprise UNIX Server Batch Status Service Works

About this task

The IBM Sterling Connect:Enterprise UNIX Server Batch Status service sends a query to Sterling Connect:Enterprise for UNIX and, optionally, can be used to update process flags, the CEUBatchId or the CEUMailboxId.

The following example describes what happens when a business process is initiated by a Sterling Connect:Enterprise for UNIX schedule notification, but then, as a result of a downstream activity's error, the Batch Status service is used to alter the Sterling Connect:Enterprise for UNIX transmitted (T) flag so that the batch can be extracted again.

Procedure

1. The Sterling Connect:Enterprise UNIX Server Adapter initiates a business process in response to a schedule notification from Sterling Connect:Enterprise for UNIX.
2. The business process runs the extract service which copies the batch from the mailbox and sets the transmitted flag on the batch indicating that Application extracted the batch. In this case the batch is allowed to be transmitted only once.
3. The business process runs a translation of the batch from EDI to XML. However, a map error occurs during translation and the batch is not translated properly.
4. The error triggers the start of the Batch Status service.
5. The Batch Status service passes a message to Sterling Connect:Enterprise for UNIX to remove the transmitted flag from the batch. The STATUS_INFO returned by Sterling Connect:Enterprise for UNIX is placed in process data. Here is an example of output from a Batch Status service that was used to update all batches in the bporders mailbox by turning the T flag off. Notice that one batch was returned.

```
<STATUS_INFO>
<QueryParms>
<CEUMailboxId>bporders</CEUBatchNumber>
</QueryParms>
<UpdateParms>
<CEUProcessFlagUpdate>!T</CEUProcessFlagUpdate>
</UpdateParms>
<Batches>
<Batch>
<CEUBatchNumber>189</CEUBatchNumber>
<CEUBatchDateTime>2/21/04 8:24PM</CEUBatchDateTime>
<CEUBatchSize>123456967</CEUBatchSize>
<CEUMailboxId>bporders</CEUMailboxId>
<CEUBatchId>PriDoc.128M</CEUBatchId>
<CEUProcessFlagStatus>A,R,Z</CEUProcessFlagStatus>
</Batch>
</Batches>
</STATUS_INFO>
```

6. Now the batch can be extracted again.

The following example illustrates the XPath statements in the subsequent Extract service. These statements derive the needed information from the STATUS_INFO content in the process data.

```
<!-- Extract batch by xpath to the provided batch number and datetime in ProcessData. -->
<operation name="CEU Extract Service">
<participant name="CEUServerExtract"/>
<output message="ExtractRequest">
```

```

<assign to="CEUBatchNumber"
      from="STATUS_INFO/Batches/Batch/CEUBatchNumber/text()">
</assign>
<assign to="CEUBatchDateTime" from="STATUS_INFO/Batches/Batch/CEUBatchDateTime/text()">
</assign>
<assign to="." from="*" />
</output>
<input message="inmsg">
  <assign to="." from="*" />
</input>
</operation>

```

Implementing the Sterling Connect:Enterprise UNIX Server Batch Status Service

About this task

Before implementing any specific Sterling Connect:Enterprise UNIX Server services, outline the business tasks to be completed between Sterling Connect:Enterprise for UNIX and Application, and decide which Sterling Connect:Enterprise UNIX Server services are needed.

To implement the Sterling Connect:Enterprise UNIX Server Batch Status service, complete the following tasks:

Procedure

1. Configure the Sterling Connect:Enterprise UNIX Server Adapter to be used with this service.
2. Configure the pre-installed copy of the Sterling Connect:Enterprise UNIX Server Batch Status service. For information, see [Configuring the Sterling Connect:Enterprise UNIX Server Batch Status Service](#).
3. Use the Sterling Connect:Enterprise UNIX Server Batch Status service in a business process.

Configuring the Sterling Connect:Enterprise for UNIX Server Batch Status Service

To configure the Sterling Connect:Enterprise UNIX Server Batch Status service, you can optionally specify field settings in Application, but you must specify field settings in the GPM.

Application Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Batch Status service:

Note: The field names in parentheses represent the corresponding field names in the GPM. This information is provided for your reference.

Field	Description
Name	Unique and meaningful name for the service configuration. Required.
Description	Meaningful description for the service configuration, for reference purposes. Required.

Field	Description
Select a Group	<p>Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are:</p> <ul style="list-style-type: none"> • None – You do not want to include this configuration in a group at this time (default) • Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration. • Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. <p>For more information about service groups see Managing Services and Adapters.</p>
CEU Server Adapter Instance Name (CEUServerAdapterInstanceName)	<p>The instance of the Sterling Connect:Enterprise UNIX Server Adapter that the Batch Status service should use.</p> <p>The preconfigured service uses the preconfigured adapter named CEU Server Adapter BP.</p>

GPM Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Batch Status service in the GPM:

Field	Description
Config	Name of the service configuration. Required.
CEUBatchFromDate	Specifies all batches that were created on or after this date. Optional.
CEUBatchId	Specifies the name of one batch in Sterling Connect:Enterprise for UNIX. Optional.
CEUBatchNumber	Specifies the batch number. Optional.
CEUBatchOriginator	Specifies the originator of the batch. Optional.
CEUBatchToDate	Specifies all batches that were created on or before this date. Optional
CEUMailboxId	Specifies the mailbox identification where the batch resides. Optional
CEUProcessFlagQuery	<p>Lists the process flags that you are sending the query about. This is a comma-delimited string of process flags. Use an exclamation point (!) before a flag to indicate a lack of the flag. Optional.</p> <p>Example: Y, R, T, P, !V would mean to query batches that are binary (Y), requestable (R), transmitted (T) or transmission in progress (P) but which have not been acknowledged by Application (!V)</p>

Field	Description
CEUProcessFlagUpdate	Specifies what the update to the flags should be. Needs the same format as in CEUProcessFlagQuery. Optional. Example: V, !R, would mean to change the queried batches to acknowledged (!V) and not requestable (!R).
CEUServiceAdapterInstanceName	The instance of the Sterling Connect:Enterprise UNIX Server Adapter that the Batch Status service should use. This is typically already defined. Required.
NewCEUBatchId	Specifies the identification you want to use to update the CEUBatchId. Optional.
NewCEUMailboxId	Specifies the identification you want to use to update the CEUMailboxId. Optional.

Note: The service is used as a query only, unless one or more of these three parameters are defined: CEUProcessFlagUpdate, NewCEUBatchId, NewCEUMailboxId.

Output from Service to Business Process

The following table describes the information placed in process data by the Sterling Connect:Enterprise UNIX Server Batch Status service (Message From Service).

Parameter	Description
CEUBatchNumber	This is the batch number provided to this service as input. (Combined with CEUBatchDateTime this uniquely identifies the batch.)
CEUBatchId	This is the name of the batch that was provided to the service as input prior to any update.
CEUMailboxId	This is the name of the mailbox that was provided to the service as input prior to any update.
CEUProcessFlagQuery	These are the process flags that were queried by the service.
CEUProcessFlagUpdate	These are the process flags that were updated by the Batch Status service.
CEUBatchDateTime	The batch date and time. Combined with CEUBatchNumber, this uniquely identifies the batch queried or changed by the service.
CEUBatchSize	Size of the message in bytes
CEUProcessFlagStatus	This is the status of all process flags as they appear after the Batch Status service.

Business Process Example

The following example illustrates a small part of the BPML that utilizes the Sterling Connect:Enterprise UNIX Server Batch Status service.

```
<operation name="CEUServerBatchStatusServiceType">
  <participant name="CEUServerBatchStatus"/>
  <output message="CEUServerBatchStatusServiceTypeInputMessage">
    <assign to="CEUBatchNumber" from="ACD_INFO/Batches/Batch[number(//numBatches/text())]/CEUBatchNumber/text()">
      </assign>
    </output message>
  </participant>
</operation>
```

```
<assign to="." from="*">
  </assign>
</output>
<input message="inmsg">
  <assign to="." from="*"></assign>
</input>
</operation>
```

Connect:Enterprise for UNIX Begin Session Service

How the Sterling Connect:Enterprise for UNIX Server Begin Session Service Works

About this task

The following steps describe what happens when the IBM Sterling Connect:Enterprise for UNIX Server Begin Session service is used in a business process that initiates a remote connect.

Procedure

1. The Application business process attempts to initiate a communication session with Sterling Connect:Enterprise for UNIX through the Sterling Connect:Enterprise for UNIX Server Adapter. The adapter submits a user ID and password to gain access.
2. The adapter returns a CEUSessionId to the Begin Session service. The CEUSessionId is put in the process data.
3. All Sterling Connect:Enterprise for UNIX Server services (add, extract, batch status and log) that follow the Begin Session service and precede the End Session service are captured under that one CEUSessionId.

Implementing the Sterling Connect:Enterprise for UNIX Server Begin Session Service

About this task

Before implementing any specific Sterling Connect:Enterprise for UNIX Server services, outline the business tasks to be completed between Sterling Connect:Enterprise for UNIX and Application, and decide which Sterling Connect:Enterprise for UNIX Server services are needed.

To implement the Sterling Connect:Enterprise for UNIX Server Begin Session service, complete the following tasks:

Procedure

1. Configure the Sterling Connect:Enterprise for UNIX Server Adapter to be used with this service.
2. Configure the pre-installed copy of the Sterling Connect:Enterprise for UNIX Server Begin Session service. For information, see *Configuring the Sterling Connect:Enterprise UNIX Server Begin Session Service*.
3. Use the Sterling Connect:Enterprise UNIX Server Begin Session service in a business process.

Settings to Configure the Sterling Connect:Enterprise UNIX Server Begin Session Service

To configure the Sterling Connect:Enterprise UNIX Server Begin Session service, you must specify settings for the following fields in Application:

Note: The field names in parentheses represent the corresponding field names in the GPM. This information is provided for your reference.

Field	Description
Name	Unique and meaningful name for the service configuration. Required.
Description	Meaningful description for the service configuration, for reference purposes. Required.
Select a Group	<p>Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are:</p> <ul style="list-style-type: none"> • None – You do not want to include this configuration in a group at this time (default) • Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration. • Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. <p>For more information about service groups see Managing Services and Adapters.</p>
CEU Server Adapter Instance Name (CEUServerAdapterInstanceName)	<p>The instance of the Sterling Connect:Enterprise UNIX Server Adapter that the Begin Session service should use.</p> <p>The preconfigured Begin Session service uses the preconfigured adapter named CEU Server Adapter BP.</p>

Output from Service to Business Process

The following table describes the output from the Sterling Connect:Enterprise UNIX Server Begin Session service to the business process:

Parameter	Description
CEUSessionId	Specifies the identifier for the session established between the adapter and the Sterling Connect:Enterprise for UNIX instance.

Business Process Example

The following example illustrates a part of the BPML that uses a Sterling Connect:Enterprise UNIX Server Begin Session service to run a remote connect session. All activity is bracketed by the Begin Session and End Session services.

The Begin Session service sets CEUSessionId in process data. The Add and Extract services use that CEUSessionId, and End Session removes the CEUSessionId from process data.

```
<process name="CEUInterop_AddExtractService">
  <sequence>
    <operation name="CEUServerBeginSessionServiceType">
      <participant name="CEUServerBeginSession"/>
      <output message="CEUServerBeginSessionServiceTypeInputMessage">
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="." from="*"></assign>
      </input>
    </operation>
    <operation name="CEU Add Service">
      <participant name="TestCEUServerAdd"/>
      <output message="AddRequest">
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="CEUAddServiceResults" from="*"></assign>
      </input>
    </operation>
    <!-- Remove Primary document to verify extract service -->
    <operation name="Release Service">
      <participant name="ReleaseService"/>
      <output message="ReleaseServiceTypeInputMessage">
        <assign to="TARGET" from="'PrimaryDocument'"></assign>
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="." from="*"></assign>
      </input>
    </operation>
    <operation name="CEU Extract Service">
      <participant name="TestCEUServerExtract"/>
      <output message="ExtractRequest">
        <assign to="CEUBatchNumber" from="CEUAddServiceResults/CEUBatchNumber/text()"></assign>
      </output>
      <input message="inmsg">
        <assign to="CEUExtractServiceResults" from="*"></assign>
      </input>
    </operation>
    <operation name="CEUServerEndSessionServiceType">
      <participant name="CEUServerEndSession"/>
      <output message="CEUServerEndSessionServiceTypeInputMessage">
        <assign to="." from="*"></assign>
      </output>
      <input message="inmsg">
        <assign to="." from="*"></assign>
      </input>
    </operation>
  </sequence>
</process>
```

Connect:Enterprise for UNIX End Session Service

How the Sterling Connect:Enterprise UNIX Server End Session Service Works

In the case of Auto Connect:

- When the business process is initiated by an IBM Sterling Connect:Enterprise for UNIX schedule notification, place the End Session service after the final Sterling Connect:Enterprise UNIX Server service in the business process.
- If the End Session service is not included in the business process, the session with Sterling Connect:Enterprise for UNIX will end automatically 30 seconds after the business process becomes inactive.
- Non-Sterling Connect:Enterprise for UNIX activities, such as translations, can be placed before the End Session service. This is useful, for example, if you want the Sterling Connect:Enterprise for UNIX Server Log service to notify Sterling Connect:Enterprise for UNIX if errors result from the other activities.

In the case of Remote Connect:

- When the business process initiates a remote connect session with Sterling Connect:Enterprise for UNIX, you can use the Begin Session and End Session services to group activities under the same CEUSessionId.
- If the Begin/End Session services are not used, each Sterling Connect:Enterprise UNIX Server service, such as Add or Extract, runs with its own CEUSessionId. Each activity is represented in Sterling Connect:Enterprise for UNIX reporting as separate, unrelated entries.

Implementing the Sterling Connect:Enterprise UNIX Server End Session Service

About this task

Before implementing any specific Sterling Connect:Enterprise UNIX Server services, outline the business tasks to be completed between Sterling Connect:Enterprise for UNIX and Application, and decide which Sterling Connect:Enterprise UNIX Server services are needed.

To implement the Sterling Connect:Enterprise UNIX Server End Session service, complete the following tasks:

Procedure

1. Configure the Sterling Connect:Enterprise UNIX Server Adapter to be used with this service.
2. Configure the pre-installed copy of the Sterling Connect:Enterprise UNIX Server End Session service. For information, see [Configuring the Sterling Connect:Enterprise UNIX Server End Session Service](#).
3. Use the Sterling Connect:Enterprise UNIX Server End Session service in a business process.

Settings to Configure the Sterling Connect:Enterprise UNIX Server End Session Service

To configure the Sterling Connect:Enterprise UNIX Server End Session service, you must specify settings for the following fields in Application:

Note: The field names in parentheses represent the corresponding field names in the GPM. This information is provided for your reference.

Field	Description
Name	Unique and meaningful name for the service configuration. Required.

Field	Description
Description	Meaningful description for the service configuration, for reference purposes. Required.
Select a Group	<p>Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are:</p> <ul style="list-style-type: none"> • None – You do not want to include this configuration in a group at this time (default) • Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration. • Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. <p>For more information about service groups see Managing Services and Adapters.</p>
CEU Server Adapter Instance Name (CEUServerAdapterInstanceName)	<p>The instance of the Sterling Connect:Enterprise UNIX Server Adapter that the End Session service should use.</p> <p>The preconfigured End Session service uses the preconfigured adapter named CEU Server Adapter BP.</p>

Output from Business Process to Service

The following table describes the output from the business process to the Sterling Connect:Enterprise UNIX Server End Session service:

Parameter	Description
CEUSessionId	Specifies the identifier for the session established between the adapter and the Sterling Connect:Enterprise for UNIX instance.

Business Process Example

A Business Process protocol daemon that runs by a schedule notification and runs synchronously where all activity is under the CEUSessionId that is found in process data:

```
<process name="CEUInterop_ACDEExtractLoop">
  <rule name="notFinished">
    <condition>number(counter/text()) &gt; 0</condition>
  </rule>
  <sequence name="Sequence Start">
    <assign to="counter" from="count(//ACD_INFO/Batches/Batch/BatchNumber/text())"></assign>
  <sequence name="theLoop">
    <!-- Remove Primary document to verify extract service -->
    <operation name="Release Service">
      <participant name="ReleaseService"/>
      <output message="ReleaseServiceTypeInputMessage">
        <assign to="TARGET" from="'PrimaryDocument'"></assign>
        <assign to="." from="*"></assign>
      </output>
    </sequence>
  </sequence>
</process>
```

```

    <input message="inmsg">
      <assign to="." from="*"></assign>
    </input>
  </operation>
<operation name="CEU Extract Service">
  <participant name="TestCEUServerExtract"/>
  <output message="ExtractRequest">
    <assign to="CEUBatchNumber" from="ACD_INFO/Batches/Batch[number(//counter/text())]/BatchNumber/text()">
    </assign>
  </output>
  <input message="inmsg">
    <assign to="MessageFromExtractService" from="*" append="true"/>
    <assign to="." from="PrimaryDocument" append="true"/>
  </input>
  </operation>
<assign to="counter" from="number(counter/text()) - 1"></assign>
<choice>
  <select>
    <case ref="notFinished" activity="doRepeat"/>
  </select>
</choice>
<repeat name="doRepeat" ref="theLoop"/>
</choice>
</sequence>
<operation name="CEUServerEndSessionServiceType">
  <participant name="CEUServerEndSession"/>
  <output message="CEUServerEndSessionServiceTypeInputMessage">
    <assign to="." from="*"></assign>
  </output>
  <input message="inmsg">
    <assign to="." from="*"></assign>
  </input>
  </operation>
</sequence>
</process>

```

Connect:Enterprise for UNIX Extract Service

How the Sterling Connect:Enterprise UNIX Server Extract Service Works

About this task

The following describes what happens when this service is used in a business process that is initiated by an IBM Sterling Connect:Enterprise for UNIX schedule notification.

Procedure

1. The Sterling Connect:Enterprise UNIX Server Adapter initiates a business process in response to a schedule notification from Sterling Connect:Enterprise for UNIX.
2. The business process specifies to extract data from a Sterling Connect:Enterprise for UNIX mailbox using the Sterling Connect:Enterprise UNIX Server Extract service. This service works through the Sterling Connect:Enterprise UNIX Server Adapter.
3. Using the information from the schedule notification, the Sterling Connect:Enterprise UNIX Server Adapter extracts the batch that matches the CEUBatchNumber and CEUBatchDateTime in process data.
4. Sterling Connect:Enterprise for UNIX sets the Transmitted (T) flag on the batch indicating that Application extracted the batch.

5. Application adds a log entry into Sterling Connect:Enterprise for UNIX that includes the business process ID of this business process.
6. The service adds the batch into the business process as a primary document.
7. Other batch details are added to process data.
For information, see Output from Service to Business Process.
8. Application sets the correlations between the business process that initiated the request and batch summary data from Sterling Connect:Enterprise for UNIX. These include: CEUBatchId, CEUMailboxId, CEUBatchNumber, schedule definition name and CEUSessionId. These correlations allow subsequent searches for this information using the Central Search function.
9. The system performs additional activities as indicated within the business process. For example, the contents of the batch could be translated into another format.

Implementing the Sterling Connect:Enterprise UNIX Server Extract Service

About this task

Before implementing any specific Sterling Connect:Enterprise UNIX Server services, outline the business tasks to be completed between Sterling Connect:Enterprise for UNIX and Application, and decide which Sterling Connect:Enterprise UNIX Server services are needed.

To implement the Sterling Connect:Enterprise UNIX Server Extract service, complete the following tasks:

Procedure

1. Configure the Sterling Connect:Enterprise UNIX Server Adapter to be used with this service.
2. Configure the pre-installed copy of the Sterling Connect:Enterprise UNIX Server Extract service. For information, see Settings to Configure the Sterling Connect:Enterprise UNIX Server Extract Service.
3. Use the Sterling Connect:Enterprise UNIX Server Extract service in a business process.

Settings to Configure the Sterling Connect:Enterprise UNIX Server Extract Service

To configure the Sterling Connect:Enterprise UNIX Server Extract service, you must specify field settings in Application and in the GPM.

Application Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Extract service:

Note: The field names in parentheses represent the corresponding field names in the GPM. This information is provided for your reference.

Field	Description
Name	Unique and meaningful name for the service configuration. Required.

Field	Description
Description	Meaningful description for the service configuration, for reference purposes. Required.
Select a Group	<p>Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are:</p> <ul style="list-style-type: none"> • None – You do not want to include this configuration in a group at this time (default) • Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration. • Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. <p>For more information about service groups see Managing Services and Adapters.</p>
CEU Server Adapter Instance Name (CEUServerAdapterInstanceName)	<p>The instance of the Sterling Connect:Enterprise UNIX Server Adapter that the Extract service should use.</p> <p>The preconfigured service uses the preconfigured adapter named CEU Server Adapter BP.</p>
Document Storage (DatabaseOrFileSystem)	<p>Defines how the document will be stored in the system. Required. Valid values are:</p> <ul style="list-style-type: none"> • System Default • Database • File System <p>Choose file system when handling very large batches.</p>

GPM Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Extract service in the GPM:

Field	Description
Config	Name of the service configuration. Required.
CEUBatchNumber	Numeric identifier for a batch within Sterling Connect:Enterprise for UNIX
CEUBatchDateTime	Combined with CEUBatchNumber, this provides unique access to a batch. That is, these two parameters identify what batch is to be extracted.
CEUServerAdapterInstanceName	Normally, this is already defined.
DatabaseOrFileSystem	Normally, this is already defined.

The required parameters CEUBatchNumber and CEUBatchDateTime can be obtained using XPath expressions when the business process is initiated by an auto connect. The following are examples of such XPath expressions:

```
<assign to="CEUBatchNumber" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
/CEUBatchNumber/text()"></assign>
<assign to="CEUBatchDateTime" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
/CEUBatchDateTime/text()"></assign>
```

Output from Business Process to Service

The following table describes the output from the business process to the Sterling Connect:Enterprise UNIX Server Extract service (Message To Service):

Parameter	Description
CEUBatchNumber	Numeric identifier for a batch within Sterling Connect:Enterprise for UNIX
CEUBatchDateTime	Combined with CEUBatchNumber provides unique access to a batch

Output from Service to Business Process

The following table describes the information that is placed in process data by the Sterling Connect:Enterprise UNIX Server Extract service (Message From Service):

Parameter	Description
PrimaryDocument	Batch payload
CEUBatchNumber	Echoes the batch number provided to this service as input.
CEUBatchDateTime	Echoes the batch date and time provided to this service as input.
CEUBatchSize	Size of the message in bytes.
CEUBatchId	Identifier (name) of the batch in Sterling Connect:Enterprise for UNIX.
CEUMailboxId	The Sterling Connect:Enterprise for UNIX Mailbox ID from which the batch was extracted.
CEUSessionId	Sterling Connect:Enterprise for UNIX session that the extract activity is associated with.
CEUProcessFlagStatus	Depicts the flag settings for the batch before the extract occurred. Comma delimited characters. For more information, see your Sterling Connect:Enterprise for UNIX documentation.

Business Process Example

The following example illustrates a small part of the BPML that utilizes the Sterling Connect:Enterprise UNIX Server Extract service:

```
<operation name="CEU Extract Service">
  <participant name="CEUServerExtract"/>
  <output message="ExtractRequest">
    <assign to="CEUBatchNumber" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
/CEUBatchNumber/text()"></assign>
    <assign to="CEUBatchDateTime" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
/CEUBatchDateTime/text()"></assign>
```



```

    <assign to="." from="*" />
<!--    <assign to="DatabaseOrFileSystem">db</assign> -->
</output>
<input message="inmsg">
    <assign to="CEUExtractServiceResults" from="*" append="true"/>
    <assign to="." from="PrimaryDocument"/>
</input>
</operation>

```

Connect:Enterprise for UNIX Log Service

How the Sterling Connect:Enterprise UNIX Server Log Service Works

About this task

The following describes an example of what happens when this service is used in a business process to log success and error messages to the IBM Sterling Connect:Enterprise for UNIX interface.

Procedure

1. A business process extracts a batch from Sterling Connect:Enterprise for UNIX and passes it along the business process for EDI-to-XML translation.
2. An error occurs during translation and the batch is not translated properly.
3. As a result of the error, the Sterling Connect:Enterprise UNIX Server Log service writes a log message about the translation failure to Sterling Connect:Enterprise for UNIX.
4. When the Sterling Connect:Enterprise for UNIX administrator views information about the activity, the message provided by the Log service is displayed with a hyperlink to Application.

Implementing the Sterling Connect:Enterprise UNIX Server Log Service

About this task

Before implementing any specific Sterling Connect:Enterprise UNIX Server services, outline the business tasks to be completed between Sterling Connect:Enterprise for UNIX and Application, and decide which Sterling Connect:Enterprise UNIX Server services are needed.

To implement the Sterling Connect:Enterprise UNIX Server Log service, complete the following tasks:

Procedure

1. Configure the Sterling Connect:Enterprise UNIX Server Adapter to be used with this service.
2. You can use the pre-installed copy of the Sterling Connect:Enterprise UNIX Server Log service, or create a new copy. You might want to create a new copy if you are using more than one copy of the Sterling Connect:Enterprise UNIX Server Adapter, for example. For information, search on Managing Services and Adapters.
3. Configure the Sterling Connect:Enterprise UNIX Server Log service. For information, see Settings to Configure the Sterling Connect:Enterprise UNIX Server Log Service.

- Use the Sterling Connect:Enterprise UNIX Server Log service in a business process.

Settings to Configure the Sterling Connect:Enterprise UNIX Server Log Service

To configure the Sterling Connect:Enterprise UNIX Server Log service, you must specify field settings in Application and in the GPM. This is only necessary if you create a new copy of the service; the pre-installed copy of the service does not require any configuration.

Application Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Log service and also describes the output from the business process to the Sterling Connect:Enterprise UNIX Server Log service (Message To Service):

Note: The field names in parentheses represent the corresponding field names in the GPM. This information is provided for your reference.

Field	Description
Name	Unique and meaningful name for the service configuration. Required.
Description	Meaningful description for the service configuration, for reference purposes. Required.
Select a Group	<p>Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are:</p> <ul style="list-style-type: none"> None – You do not want to include this configuration in a group at this time (default) Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration. Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. <p>For more information about service groups see Managing Services and Adapters.</p>
CEU Server Adapter Instance Name (CEUServerAdapterInstanceName)	<p>The instance of the Sterling Connect:Enterprise UNIX Server Adapter that the Log service should use.</p> <p>The preconfigured service uses the preconfigured adapter named CEU Server Adapter BP.</p>

GPM Configuration

The following table describes the fields used to configure the Sterling Connect:Enterprise UNIX Server Log service in the GPM:

Field	Description
Config	Name of the service configuration. Required.
CEUBatchId	Name of the batch to which the error or success message relates. Viewed in the Sterling Connect:Enterprise for UNIX tracking reports as informational. Populates columns in Sterling Connect:Enterprise for UNIX detailed reporting screens on the administration user interface. Optional
CEUBatchNumber	This is provided to the service as input. Viewed in the Sterling Connect:Enterprise for UNIX tracking reports as informational. Populates columns in Sterling Connect:Enterprise for UNIX detailed reporting screens on the administration user interface. Optional
CEUMailboxId	Sterling Connect:Enterprise for UNIX mailbox where the batch resides. Viewed in the Sterling Connect:Enterprise for UNIX tracking reports as informational. Populates columns in Sterling Connect:Enterprise for UNIX detailed reporting screens on the administration user interface. Optional
CEULogStatusCode	The status code that can be viewed in the Sterling Connect:Enterprise for UNIX tracking statistics column. Success (0) and Error (FA). Required
CEUServerAdapterInstanceName	Normally, this is already defined.

Business Process Example

The following example illustrates a small part of the BPML that utilizes the Sterling Connect:Enterprise UNIX Server Log service.

```
<operation name="CEU Log Service">
  <participant name="CEUServerLog"/>
  <output message="LogRequest">
    <assign to="CEUMailboxId" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
      /CEUMailboxId/text()"></assign>
    <assign to="CEUBatchId" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
      /CEUBatchId/text()"></assign>
    <assign to="CEUBatchNumber" from="ACD_INFO/Batches/Batch[number(//loop_counter/text())]
      /CEUBatchNumber/text()"></assign>
    <assign to="CEULogStatusCode">Error</assign>
    <assign to="." from="*"></assign>
  </output>
  <input message="inmsg">
    <assign to="." from="*"></assign>
  </input>
</operation>
```

Connect:Enterprise for UNIX Server Adapter

Setting Up the Sterling Connect:Enterprise UNIX Server Adapter

To establish Application and IBM Sterling Connect:Enterprise for UNIX for interoperability, follow this procedure:

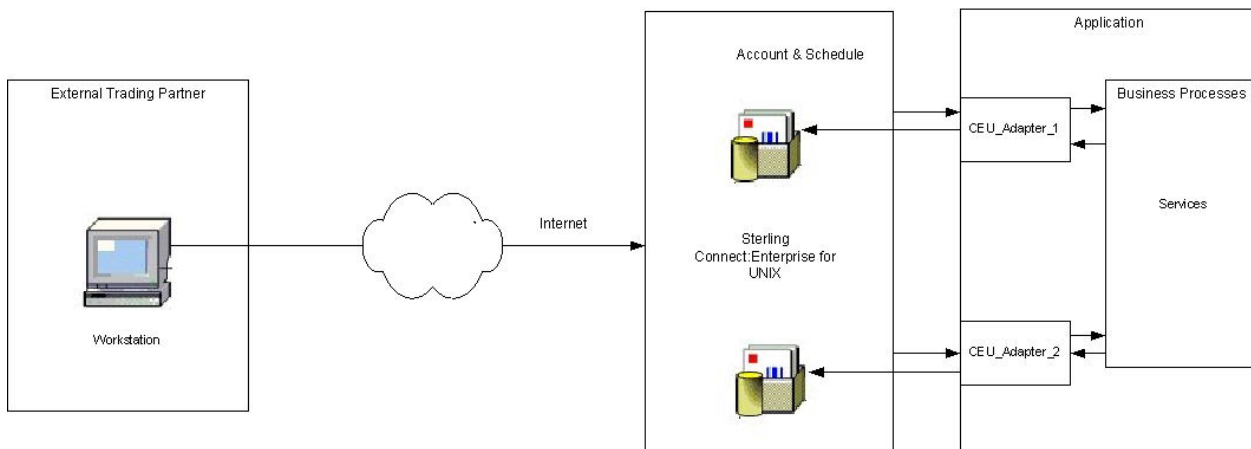
Procedure

1. Define an account (RSD–remote site definitions) to allow Application to connect into Sterling Connect:Enterprise for UNIX using Sterling Connect:Enterprise for UNIX. (This task is optional because the system is delivered with a predefined account called samp_bp.)
2. Define a schedule (ACD–auto connect definitions) to indicate when to notify Application using Sterling Connect:Enterprise for UNIX. (This task is optional because the system is delivered with a predefined schedule called samp_bp.acd.)
3. Configure the Sterling Connect:Enterprise UNIX Server Adapter using Application. (Though the preconfigured adapter, CEU Server Adapter BP, is delivered with the system, you must supply some additional parameters and enable the configuration.)
4. Test connectivity between Application and Sterling Connect:Enterprise for UNIX. To do this:
 - Enable the adapter
 - Perform cmusession quick test.
5. Run the Interoperability Verification Demonstration.

Interoperability

The Sterling Connect:Enterprise UNIX Server Adapter is a Application component that acts as a conduit for connectivity with Sterling Connect:Enterprise for UNIX and enables interoperability between Application and Sterling Connect:Enterprise for UNIX.

The following figure shows how Application and Sterling Connect:Enterprise for UNIX work together to exchange information. It also illustrates load balancing where multiple adapters connect to a single Sterling Connect:Enterprise for UNIX host and port.



The adapter must be configured with a valid Sterling Connect:Enterprise for UNIX host, port, ID, and password. After the adapter is configured and enabled, Sterling Connect:Enterprise for UNIX registers the adapter as a Business Process protocol daemon.

Process of Responding to a Notification Schedule

The following describes how the Connect:Enterprise UNIX Server Adapter responds to a notification schedule:

Procedure

1. A configuration of the adapter receives notification from Sterling Connect:Enterprise for UNIX when data meeting the criteria of a schedule notification is placed in a Sterling Connect:Enterprise for UNIX mailbox.
2. The adapter retrieves summary data about the batch from the Sterling Connect:Enterprise for UNIX mailbox according to parameters defined in the schedule.

For the summary data to be retrieved, the R (requestable) processing flag must be present. However, batch summary data with the following processing flags are not retrieved:

- P (Transmission in progress)
 - I (Incomplete)
 - D (Deleted)
 - T (Transmitted)
 - V (Application acknowledged)
3. The adapter initiates the Application business process (defined in the Sterling Connect:Enterprise for UNIX schedule) and places the summary data into process data.
 4. The adapter waits for further instructions from the Application business process.

Process Data

In the case of an auto connect, the batch summary data identifies the adapter that was used, the Sterling Connect:Enterprise for UNIX SessionId that has been started, and Auto Connect Definition (ACD) information including specific batch summary data. At this point the business document is not in process data. The next step depends upon your business process.

In the case of remote connect, the content of the information placed in process data by the adapter varies depending upon the service that begins the business process.

CEUAdapterInstanceName and SessionId

The configuration name of the Sterling Connect:Enterprise UNIX Server Adapter (CEUAdapterInstanceName) and SessionId are at the top level of the process data for visibility and use by the services in the business process, as in the following example:

```
<?xml version="1.0" encoding="UTF-8"?>
<ProcessData>
  <CEUAdapterInstanceName>BP</CEUAdapterInstanceName>
  <CEUAdapterInstanceName>BP</CEUAdapterInstanceName>
  <SessionId>2057</SessionId>
  <ACD_INFO>
    .
    .
    .
  </ACD_INFO>
</ProcessData>
```

These parameters are important because they indicate which Sterling Connect:Enterprise UNIX Server Adapter configuration started the business process and what session the services will be acting on behalf of. Because you can have

multiple configurations of the adapter, each Sterling Connect:Enterprise UNIX Server service used in the business process needs to determine which adapter configuration to communicate with so that the business process activity is passed through the correct (requesting) adapter.

Note: Because the SessionId is put into process data during a schedule notification, it serves as an implied Begin Session; therefore, you do not need to use a Begin Session service in a business processes initiated from a schedule notification. However, you must still use an End Session service to bracket all activities within the same SessionId.

The CEUAdapterInstanceName in process data overrides whatever adapter the services are configured to use. Therefore, if you configure a new Sterling Connect:Enterprise UNIX Server Adapter you do not need to create a new suite of service configurations to point to the new adapter. The original Sterling Connect:Enterprise UNIX Server Adapter service configurations are reusable.

Business Process Parameters Defined in Sterling Connect:Enterprise for UNIX

The business process parameters in the following example include mailbox information and additional user-defined XML content that is pertinent to the business process. The parameters are entered in Sterling Connect:Enterprise for UNIX as “Additional Business Process Parameters” when the remote BP (Business Process protocol daemon) block is defined within a schedule.

```
<BusinessProcessParameters format="xml">
  <TP_INFO>
    <Mailboxes>
      <Rejected>bpreject</Rejected>
      <InProgress>bpinproc</InProgress>
      <Invoice>bpinvoic</Invoice>
      <Messages>bpmsg</Messages>
    </Mailboxes>
    <EmailAddress>jane_doe@myco.com</EmailAddress>
  </TP_INFO>
</BusinessProcessParameters>
```

Batch Summary Data

Other important pieces of information are the CEUBatchNumber and CEUBatchDateTime. These pieces of information are used when data is extracted. In the following example, you can see the batch summary data for two batches that were named *.po and located in the bporders mailbox. This information is batch summary data only and does not include the actual business document at this point in the business process.

```
.
.
.
<Batches>
  <Batch>
    <CEUBatchNumber>5262</CEUBatchNumber>
    <CEUMailboxId>Process Dataorders</CEUMailboxId>
    <CEUBatchId>CarOrder.po</CEUBatchId>
    <CEUBatchSize>208</CEUBatchSize>
    <CEUBatchDateTime>12/17/03 3:38 PM</CEUBatchDateTime>
    <CEUProcessFlagStatus>C,R,J,Z</CEUProcessFlagStatus>
  </Batch>
  <Batch>
    <CEUBatchNumber>5263</CEUBatchNumber>
    <CEUMailbox>bporders</CEUMailbox>
    <CEUBatchId>CarOrder.po</CEUBatchId>
```

```
<CEUBatchSize>208</CEUBatchSize>
<CEUBatchDateTime>12/17/03 3:40 PM</CEUBatchDateTime>
</Batch>
</Batches>
</ACD_INFO>
</ProcessData>
```

Sterling Connect:Enterprise UNIX Server Services

When the Application business process starts, it uses the Sterling Connect:Enterprise UNIX Server services to perform activities on batches in or from the Sterling Connect:Enterprise for UNIX mailbox.

The following services are Application components that work in collaboration with the Sterling Connect:Enterprise UNIX Server Adapter:

- Sterling Connect:Enterprise UNIX Server Add service - Adds a batch to a Sterling Connect:Enterprise for UNIX mailbox
- Sterling Connect:Enterprise UNIX Server Extract service - Extracts a batch from a Sterling Connect:Enterprise for UNIX mailbox
- Sterling Connect:Enterprise UNIX Server Begin Session service - Begins a session with an instance of Sterling Connect:Enterprise for UNIX
- Sterling Connect:Enterprise UNIX Server End Session service - Ends a session with an instance of Sterling Connect:Enterprise for UNIX
- Sterling Connect:Enterprise UNIX Server Batch Status service - Queries and updates batch summary data. This service can reach into the Sterling Connect:Enterprise for UNIX mailbox to find and even change data including status flags (process and data format), CEUMailboxId and CEUBatchId.
- Sterling Connect:Enterprise UNIX Server Log service: Writes log messages for success or error conditions to make them visible in the Sterling Connect:Enterprise for UNIX interface.

Note: If a business process ran by Sterling Connect:Enterprise for UNIX is not active, and the Sterling Connect:Enterprise UNIX Server End session service was not used, the auto connect session (seen in cmusession) times out after 30 seconds.

Interoperability Tracking

Activities between Application and Sterling Connect:Enterprise for UNIX can be tracked from either system.

The Sterling Connect:Enterprise UNIX Server Adapter writes Application correlation records to enable searches for business processes in Application that contain a particular Sterling Connect:Enterprise for UNIX AcdName or a SessionId.

The adapter also logs the notification event in Sterling Connect:Enterprise for UNIX and identifies the Application business process ID that started. This information is visible in the Sterling Connect:Enterprise for UNIX Detail Account and Schedule reports. The business process ID appears as a hyperlink. Clicking on the business process ID opens a browser window to the Detail page of that business process.

Although a configuration of the Sterling Connect:Enterprise UNIX Server Adapter is included in Application, you can create a new configuration of the adapter.

Before creating a new configuration of the adapter, review the following tips:

- You can use the Sterling Connect:Enterprise UNIX Server Adapter named “BP” for your production environment. However, if you plan to use more than one configuration of the adapter with a single installation of Sterling Connect:Enterprise for UNIX, you must create additional configurations with different names.
- The Sterling Connect:Enterprise for UNIX schedule that starts a session with Application points to a specific resource. This resource is the registered configuration of the Sterling Connect:Enterprise UNIX Server Adapter. Therefore, it may be useful to create and name configurations of the adapter according to how they will be used in Application (for example: SAP, Rosetta, or UCCnet), and then have these multiple adapters connected to a single installation of Sterling Connect:Enterprise for UNIX.

The following information is needed before you can complete configuration and enable a configuration of the Sterling Connect:Enterprise UNIX Server Adapter:

- Sterling Connect:Enterprise for UNIX Host - The host name or IP address of the Sterling Connect:Enterprise for UNIX instance that the adapter will connect to.
- Sterling Connect:Enterprise for UNIX Port - The port number the adapter will use to connect to the Sterling Connect:Enterprise for UNIX application. This should be the main Sterling Connect:Enterprise for UNIX port.
- Sterling Connect:Enterprise for UNIX User ID - The user ID required to access Sterling Connect:Enterprise for UNIX. This is a Sterling Connect:Enterprise for UNIX remote account.
- Sterling Connect:Enterprise for UNIX Password - The password required to access Sterling Connect:Enterprise for UNIX.

Implementing the Sterling Connect:Enterprise UNIX Server Adapter

About this task

To implement the Sterling Connect:Enterprise UNIX Server Adapter, complete the following tasks:

Procedure

1. Create a Sterling Connect:Enterprise UNIX Server Adapter configuration. For information, see *Managing Services and Adapters*.
2. Configure the Sterling Connect:Enterprise UNIX Server Adapter. For information, see *Settings to Configure the Sterling Connect:Enterprise UNIX Server Adapter*.
3. Test the Sterling Connect:Enterprise UNIX Server Adapter. For information, see *Testing the Sterling Connect:Enterprise UNIX Server Adapter*.
4. Create configurations of any Sterling Connect:Enterprise UNIX Server Adapter services needed for use with this adapter. See *Related services in the Overview table* for a list of these services and where to find more information about each.
5. Use the Sterling Connect:Enterprise UNIX Server Adapter and any additional configurations in a business process.

Settings to Configure the Sterling Connect:Enterprise UNIX Server Adapter

CAUTION:

If the new configuration of the Sterling Connect:Enterprise UNIX Server Adapter is not enabled, Application cannot communicate with Sterling Connect:Enterprise for UNIX.

To configure the Sterling Connect:Enterprise UNIX Server Adapter, you must specify settings for the following fields in Application:

Field	Description
Name	Unique and meaningful name for the adapter configuration. Required. Note: When enabled, the adapter name registers in Sterling Connect:Enterprise for UNIX as a Business Process protocol daemon. When you perform a cmusession command in Sterling Connect:Enterprise for UNIX, this name should be in the list of registered daemons.
Description	Meaningful description for the adapter configuration, for reference purposes. Required.
Select a Group	Group of services or adapters of the same type that can act as peers. A Service Group name is used in BPML in place of the Service Configuration name. Service Groups show up in the GPM as if they were Service Configurations. Select a Service Group to associate with this adapter. Valid values are: <ul style="list-style-type: none"> • None – You do not want to include this configuration in a group at this time (default) • Create New Group – You can enter a name for a new group in this field, which is then created along with this configuration. • Select Group – If you have already created one or more groups for this service type, they are displayed in the list. Select a group from the list. For more information about service groups see Managing Services and Adapters.
CEU Host	Host name or IP address of the Sterling Connect:Enterprise for UNIX installation that the adapter will connect to.
CEU Port	Port number the adapter will use to connect to the Sterling Connect:Enterprise for UNIX application.
CEU User ID	User ID required to access the Sterling Connect:Enterprise for UNIX application when a business process must use a remote connection to Sterling Connect:Enterprise for UNIX.
CEU Password	Password required to access the Sterling Connect:Enterprise for UNIX application when a business process must use a remote connection to Sterling Connect:Enterprise for UNIX.
Maximum active CEU sessions	Maximum number of sessions that can be active at any given time. The minimum value is 1.
Listen Port	Port number on which Application will listen for a Sterling Connect:Enterprise for UNIX Schedule notification. Valid value is a unique port number on the Application host machine that will not conflict with another process.

Output from Adapter to Business Process

The example below shows what the process data looks like when the Sterling Connect:Enterprise UNIX Server Adapter runs a business process as a result of a Sterling Connect:Enterprise for UNIX schedule notification:

```
<?xml version="1.0" encoding="UTF-8"?>
<ProcessData>
<CEUServerAdapterInstanceName>BP</CEUServerAdapterInstanceName>
<SessionId>2057</SessionId>
  <ACD_INFO>
    <AcName>samp_bp.acd</AcName>
    <SessionId>2057</SessionId>
    <AdapterName>BP</AdapterName>
    <MailboxList>bporders</MailboxList>
    <BatchIdPattern>*.xml</BatchIdPattern>
    <PutOptions>$$CODE=A</PutOptions>
    <BusinessProcessParameters format="xml">
      <TP_INFO>
        <Mailboxes>
          <Rejected>bpreject</Rejected>
          <InProgress>bpinproc</InProgress>
          <Invoice>bpinvoic</Invoice>
          <Messages>bpmsg</Messages>
        </Mailboxes>
        <EmailAddress>john.doe@myco.com</EmailAddress>
      </TP_INFO>
    </BusinessProcessParameters>
  <Batches>
    <Batch>
      <CEUBatchNumber>9218</CEUBatchNumber>
      <CEUBatchDateTime>1/19/04 9:40 AM</CEUBatchDateTime>
      <CEUBatchSize>208</CEUBatchSize>
      <CEUMailboxId>bporders</CEUMailboxId>
      <CEUBatchId>PO.xml</CEUBatchId>
      <CEUProcessFlagStatus>C,R,J,Y</CEUProcessFlagStatus>
    </Batch>
    <Batch>
      <CEUBatchNumber>9219</CEUBatchNumber>
      <CEUBatchDateTime>1/19/04 9:41 AM</CEUBatchDateTime>
      <CEUBatchSize>208</CEUBatchSize>
      <CEUMailboxId>bporders</CEUMailboxId>
      <CEUBatchId>PO.xml</CEUBatchId>
      <CEUProcessFlagStatus>C,R,J,Y</CEUProcessFlagStatus>
    </Batch>
  </Batches>
</ACD_INFO>
</ProcessData>
```

High Concurrency Load Balancing

For scheduled notifications, all communications between Application and Sterling Connect:Enterprise for UNIX use the adapter configuration in the auto connect request. Throughout the initiated business process, all services use the adapter that began the auto connection.

For remote connection, however, you can create a group of Sterling Connect:Enterprise UNIX Server Adapters that can be used for load balancing. These adapters should be identically configured except for Name and Listen port. The group name is used for the CEUServerAdapterInstanceName parameter. When a business process uses an adapter from that group for the first service, the same adapter is used to manage all subsequent activity within the same session. At each new session the least recently used adapter in the group is used.

Testing the Sterling Connect:Enterprise UNIX Server Adapter

If Sterling Connect:Enterprise for UNIX shuts down while it is connected to Application through the adapter, it will automatically reconnect when Sterling Connect:Enterprise for UNIX restarts.

About this task

To verify that Application and Sterling Connect:Enterprise for UNIX are communicating:

Procedure

1. Configure the Sterling Connect:Enterprise UNIX Server Adapter and save it. If it enables, you are connected.
2. To verify the connection in Sterling Connect:Enterprise for UNIX, enter one of the following `cmusession` commands to find a registered configuration of the adapter.

To list only registered business process protocols:

```
cmusession -u <username> -p <password>
-g
```

To list all registered protocols:

```
cmusession -u <username>
-p <password>
```

If the Sterling Connect:Enterprise UNIX Server Adapter name does not appear in the list when you perform the `cmusession` command, the most frequent problems encountered are:

- Invalid host IP address or port number
 - The adapter was not enabled when configured
3. If problems continue, turn on the special `ceuinterop.log` logging from the Operations menu, Operations > System > Log. All services and the adapter log to this file.

In addition, error statements are logged in the appserver log file (`jboss.log` or `weblogic.log`).

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