

RTView Datasource - TIBCO Rendezvous

TIBCO Rendezvous – Setup and Configuration

Proper setup of RTView for RV requires that the following environmental variables are defined:

RV_ROOT: TIBCO Rendezvous install directory (e.g., C:/TIBCO/TIBRV)

PATH: should include RV_ROOT/bin

To configure, select Tools>Options>TIBCO RV>TIBCO RV Communication

- Default Rendezvous settings are:
 - service: RV default
 - network: RV default
 - daemon: RV default
- RVA support is provided for applet communication (rarely used)

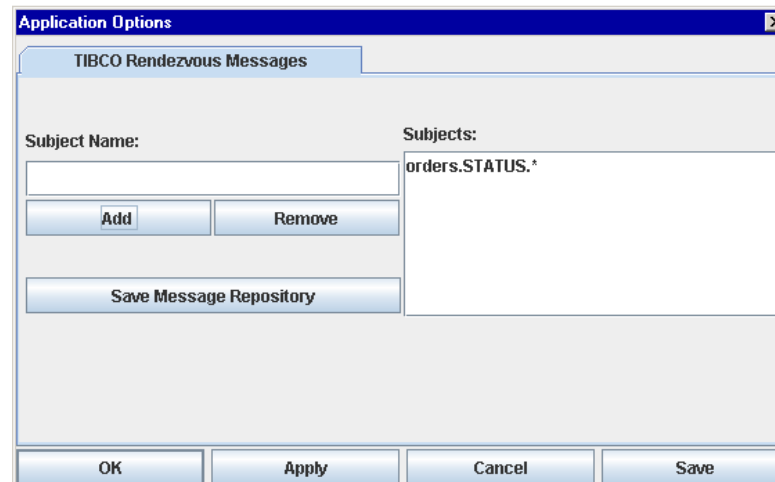
All Rendezvous related settings are saved in RVOPTIONS.ini

NOTE: Any changes to TIBCO Rendezvous settings will not take effect unless the Display Builder is restarted.

TIBCO Rendezvous – Message Configuration

Tools>Options>TIBCO Rendezvous Messages

- Provide a list of message subjects for RTView to monitor
- Message subjects will appear in drop-down lists, for easy connection to data
- Saving message repository allows configuration of screens when not connected
- Can use > or * as part of subject name



TIBCO Rendezvous – Data Attachment

Attach to TIBCO Rendezvous Message

- Select message subject from drop-down, or type in with wildcards
- Select message fields from drop-down list, or right-click to select multiple
- Message contents can be filtered by the value of a field in the message
- Substitution variables can be used within any dialog

The screenshot shows a dialog box titled "Attach To TIBCO Rendezvous Data". It contains the following fields and controls:

- Property Name:** tableStringValue
- Message Subject:** orders.STATUS.*
- Message Field:** PERCENTCOMPLETED
- Filter:**
- Filter Field Name:** *
- Filter Field Value:** *

At the bottom of the dialog are five buttons: OK, Apply, Reset, Clear, and Cancel.

TIBCO Rendezvous – RTViewDs Field Data

RTViewDs message fields contain message tracking information. Several RTViewDs message fields are available for a given RV message:

- RTViewDS_count - Number of messages received for data attachment.
- RTViewDS_size - Size of last message received for data attachment.
- RTViewDS_subjectcount - Number of message subjects received for data attachment.
- RTViewDS_time - Time of last message received for data attachment.

TIBCO Rendezvous – Data Simulator

TIBCO RV Data Simulator

- Generates simulated RV messages on the default RV transport:

orders.STATUS.*

WEATHER.REGIONAL.*

- Is invoked by the command

Start>Programs>Enterprise RTView>Simulators>TIBCO RV Simulator

or

run_rvsimdata.bat -rvservice:<> -rvnetwork:<> -rvdaemon:<>

See Appendix D>TIBCO RV in Documentation for all command line options

TIBCO Rendezvous – Nested/XML Messages

- RTView allows you to display data in nested RV fields and XML fields in RV messages.
- Create aliases in RVALIAS.ini for top-level messages, nested messages, nested fields, and XML fields in RV messages.
- To define an alias in RVALIAS.ini use the following syntax:

aliasName subject fieldNameList

Example:

```
allNames orders.STATUS.* sales::customer_info::NAME  
OrderInfo orders.STATUS.* $xml:OrderData
```

RVALIAS.ini must be created manually using a text editor.

TIBCO Rendezvous – Multiple Transports

- RTView allows you to subscribe to RV messages on multiple RV transports
- Configure messages and transport settings in TRANSPORTS.ini

```
Transport name service network daemon
```

```
Subject1
```

```
Subject2
```

```
...
```

```
End_transport
```

- You may enter – for the service, network or daemon to specify null but the transport line must contain something for all three. The name, service, network and daemon cannot contain spaces.

TIBCO Rendezvous – Multiple Transports

Example of TRANSPORTS.ini:

```
transport myTransport1 5555 - tcp:5555
orders.STATUS.Belfast
orders.STATUS.Hong Kong
end_transport

transport myTransport2 5556 - tcp:5556
orders.STATUS.Chicago
orders.STATUS.Denver
end_transport
```

Exercises

Ex1: Connect Table to RV messages

1. Start RV Simulator, type run_rvsimdata
2. Configure RV message in Tools>Options>TIBCO RV>TIBCO RV Messages
3. Enter subject orders.STATUS.*
4. Select “Save” to apply and save settings
5. Select a table and right-click on valueTable property to Attach to Data>RV
6. Select orders.STATUS.* for subject and * for Field Name
7. Select “OK” to apply.

Ex 2: Connect Graph to RV message field

1. Select a Trend Graph and right-click on trace1Value property
2. Select order.STATUS.Belfast for subject and UNITS COMPLETED for Field

Exercises

Ex 3: Create RVALIAS.ini for simulated XML data

1. Type
notepad RVALIAS.ini
2. Add the following line

WeatherWest WEATHER.REGIONAL.WEST \$xml:RegionalData

WeatherEast WEATHER.REGIONAL.EAST \$xml:RegionalData

3. Type run_rvsimdata -xml
4. In the builder, create 2 table objects
5. In the first table, attach to data>TIBCO RV
6. Type the following property values:
Message Subject:WEATHER.>
Message Fields: *
Select OK to apply
7. For property Data:rowLabelMode, change to 1.

This will show a new column describing the message subject name.

Exercises

Ex 3: Create RVALIAS.ini for simulated XML data (cont)

8. In the second table, attach to data>TIBCO RV
9. Type the following values:

Message Subject:WeatherEast

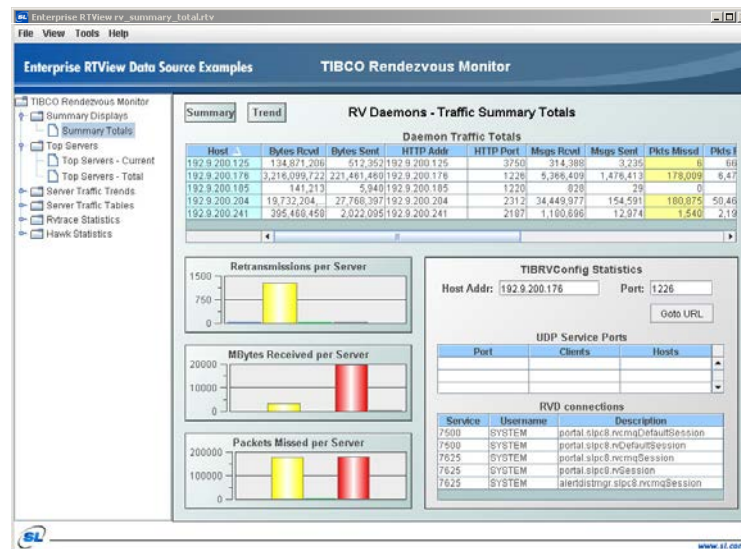
Message Fields: *

10. Select OK.
11. Save file as rv_example.rtv

TIBCO Rendezvous – RV Monitor Demo

This demo is located in RTV_HOME/demos/rvmonitor. It allows users to

- Monitor TIBCO Rendezvous traffic with statistics on a network
- View top servers for current 90 secs and total time
- Aggregate rv traffic over time
- View rvtrace information (optional) – winpcap is required for rvtrace



TIBCO Rendezvous Monitoring - Configuration

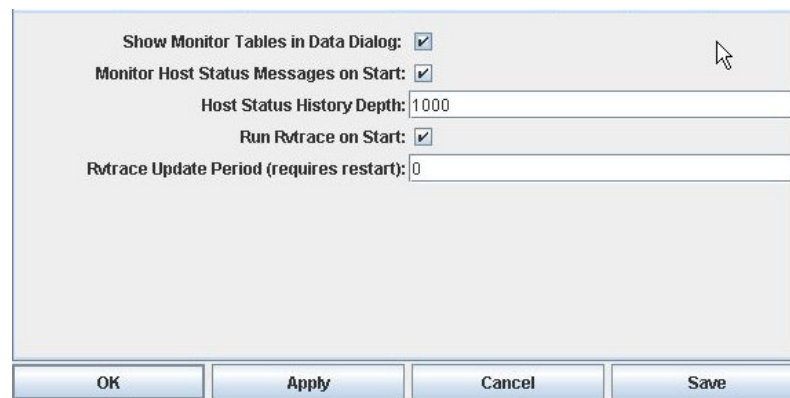
RTView can also monitoring the host messages emanating from the rv daemons.

To configure, select Tools>Options>TIBCO RV>TIBCO RV Monitoring

- Allows users to expose RV monitoring tables in Attach to Data
- Sets RTView to begin listening for TIBCO Rendezvous information messages on startup rather than waiting until a display references RTViewDs.HostStatus tables.
- Allows users to turn on rvtrace

Settings are saved in RVOPTIONS.ini

NOTE: Any changes to TIBCO Rendezvous settings will not take effect unless the Display Builder is restarted.



The screenshot shows a configuration dialog box with the following settings:

Show Monitor Tables in Data Dialog:	<input checked="" type="checkbox"/>
Monitor Host Status Messages on Start:	<input checked="" type="checkbox"/>
Host Status History Depth:	1000
Run Rvtrace on Start:	<input checked="" type="checkbox"/>
Rvtrace Update Period (requires restart):	0

At the bottom of the dialog are four buttons: OK, Apply, Cancel, and Save.

TIBCO Rendezvous Monitoring – RTViewDs

RTViewDs subject fields contain TIBCO Rendezvous monitoring information.

- **RTViewDs.HostStatusTotal** - The latest data for all hosts obtained from the TIBCO Rendezvous information message: `_RV.INFO.SYSTEM.HOST.STATUS`
- **RTViewDs.HostStatusCurrent** - The same as `RTViewDs.HostStatusTotal` however each numeric value is replaced with a delta from the previous message.
- **RTViewDs.HostStatusHistory** - A running history of all the `RTViewDs.HostStatusCurrent` rows however it only sets a property on an object when referenced for the first time. Used for trend graph history.
- **RTViewDs.HostStatusHistory2** - The same as `HostStatusHistory`, however it sets a property on an object every time a new row is added. Used in history table.
- **RTViewDs.ConfigServices** - The output from `tibrvcfg getServices` method.
- **RTViewDs.ConfigClientTransports** - The output from `tibrvcfg getClientTransports` method.
- **RTViewDs.MultiCast*** - The six tables showing all output from `rvtrace`: `PacketSource`, `PacketDest`, `PacketTotal` `SubjectSource`, `SubjectDest`, `SubjectTotal`