

OpenRTM-aist (Java) - 機能 #3886

機能 # 3779 (終了): (シ)データポートのPortProfile/ConnectorProfileのプロパティ拡張作業

[FSM4RTC] データポートのタイムスタンプ打刻機能

2017/01/25 16:33 - win-ei

ステータス:	終了	開始日:	2017/01/25
優先度:	通常	期日:	
担当者:	win-ei	進捗率:	100%
カテゴリ:		予定工数:	0.00時間
対象バージョン:			
説明			
[FSM4RTC] データポートのPortProfile/ConnectorProfileのプロパティ拡張作業に基づき、データポートにタイムスタンプの打刻機能を追加する。			

関係しているリビジョン

リビジョン 916 - 2017/01/25 16:34 - win-ei

[FSM4RTC,incompat] Connector listeners interfaces have been changed to modify info and data in the listeners and return its status. refs #3886

リビジョン 917 - 2017/01/25 17:46 - win-ei

[FSM4RTC,incompat] Connector listeners interfaces have been changed to modify info and data in the listeners and return its status. refs #3886

リビジョン 918 - 2017/01/25 17:49 - win-ei

[FSM4RTC,incompat] Some callback points have been added. refs #3886

リビジョン 919 - 2017/01/26 00:50 - win-ei

[FSM4RTC,incompat] Added ReturnCode. refs #3886

リビジョン 920 - 2017/01/26 00:55 - win-ei

[FSM4RTC,incompat] Timestamp class template has been added. Timestamp listeners have been added to InPort and OutPort. refs #3886

リビジョン 921 - 2017/01/26 18:19 - win-ei

[FSM4RTC,bugfix]Fixed bugs. refs #3886

リビジョン 922 - 2017/01/26 19:15 - win-ei

[FSM4RTC,bugfix]Fixed bugs. refs #3886

リビジョン 923 - 2017/01/27 00:50 - win-ei

[FSM4RTC,bugfix]Fixed bugs. refs #3886

リビジョン 925 - 2017/01/29 19:45 - win-ei

[FSM4RTC,bugfix]Fixed bugs. refs #3886

リビジョン 926 - 2017/01/30 18:51 - win-ei

[FSM4RTC,bugfix]Fixed bugs. refs #3886

リビジョン 941 - 2017/02/10 17:42 - win-ei

[FSM4RTC] Some sample components listener have been modified to follow ConnectorListener changes. refs #3886

履歴

#1 - 2017/01/26 15:40 - win-ei

dataport.timestamp_policy=on_writeについて

on_writeは、ConnectorDataListenerのON_BUFFER_WRITEのコールバックリスナーでタイムスタンプ打刻をしています。

サブスクリプション型がflushの接続の場合は、バッファがなく、直接、InPortへデータをpushしますので、ON_BUFFER_WRITEのコールバックイベントは発生しません。

そのため、サブスクリプション型がflushの接続の場合は、「dataport.timestamp_policy=on_write」は無効です。

dataport.timestamp_policy=on_sendについて

on_sendは、ConnectorDataListenerのON_SENDのコールバックリスナーでタイムスタンプ打刻をしています。

- データフロー型がPull接続の場合は、InPortでデータを取り込むために、ON_SENDのコールバックイベントは発生しません。そのため、データフロー型がPullの接続の場合は、「dataport.timestamp_policy=on_send」は無効です。
- インターフェース型がdirect接続でデータフロー型がPush接続の場合、直接、OutPortは直接InPortへ書込むため、ON_SENDのコールバックイベントは発生しません。そのため、「dataport.timestamp_policy=on_send」は無効です。

dataport.timestamp_policy=on_readについて

on_readは、ConnectorDataListenerのON_BUFFER_READのコールバックリスナーでタイムスタンプ打刻をしています。

- データフロー型がPull接続の場合は、OutPort側でバッファを保持するので、InPort側ではON_BUFFER_READのコールバックイベントは発生しません。そのため、「dataport.timestamp_policy=on_read」は無効です。
- インターフェース型がdirect接続でデータフロー型がPush接続の場合、直接、OutPortは直接InPortへ書込むため、ON_BUFFER_READのコールバックイベントは発生しません。そのため、「dataport.timestamp_policy=on_read」は無効です。

動作確認

別々のターミナルで ConsoleOut ConsoleIn を起動する。

rtcon でポートを接続する

on_received

- [corba_cdr][push][flush]

```
$ rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=flush --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][new][all]

```
$ rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][new][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][new][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=skip --property dataport.publisher.skip_count=1 --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][new][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][periodic][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --prope
```

```
rtty dataport.push_rate=1 --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][periodic][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][periodic][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=skip --property dataport.timestamp_policy=on_received
```

- [corba_cdr][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_received
```

- [shared_memory][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=shared_memory --property dataport.timestamp_policy=on_received
```

- [direct][push][new][on_received]

- ConsoleInのrtc.confに以下を追加してConsoleInを起動する。

```
manager.modules.load_path:./RTMExamples/SimpleIO
manager.modules.preload: ConsoleOut
manager.components.precreate: ConsoleOut
```

- rtcon でポートを接続する

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=direct --property dataport.dataflow_type=push --property dataport.timestamp_policy=on_received
```

on_send

- [corba_cdr][push][flush]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=flush --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][new][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][new][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][new][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=skip --property dataport.publisher.skip_count=1 --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][new][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][periodic][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][periodic][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][periodic][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=skip --property dataport.timestamp_policy=on_send
```

- [corba_cdr][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_send
```

- [shared_memory][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=shared_memory --property dataport.timestamp_policy=on_send
```

- [direct][push][new][on_received]

- ConsoleInのrtc.confに以下を追加してConsoleInを起動する。

```
manager.modules.load_path:./RTMExamples/SimpleIO
manager.modules.preload: ConsoleOut
manager.components.precreate: ConsoleOut
```

- rtcon でポートを接続する

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=direct --property dataport.dataflow_type=push --property dataport.timestamp_policy=on_send
```

on_read

- [corba_cdr][push][flush]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=flush --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][new][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][new][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=skip --property dataport.publisher.skip_count=1 --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][new][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][new][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][periodic][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][periodic][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][periodic][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=skip --property dataport.timestamp_policy=on_read
```

- [corba_cdr][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_read
```

- [shared_memory][push]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=shared_memory --property dataport.timestamp_policy=on_read
```

on_write

- [corba_cdr][push][new][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][new][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][new][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property
```

```
dataport.publisher.push_policy=skip --property dataport.publisher.skip_count=1 --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][new][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=new --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][periodic][all]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=all --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][periodic][fifo]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=fifo --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][periodic][skip]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=skip --property dataport.timestamp_policy=on_write
```

- [corba_cdr][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.subscription_type=periodic --property dataport.push_rate=1 --property dataport.publisher.push_policy=new --property dataport.timestamp_policy=on_write
```

- [shared_memory][push][periodic][new]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=shared_memory --property dataport.timestamp_policy=on_write
```

- [direct][push][new][on_write]

- [direct][pull][new][on_write]

- ConsoleInのrtc.confに以下を追加してConsoleInを起動する。

```
manager.modules.load_path:./RTMExamples/SimpleIO
manager.modules.preload: ConsoleOut
manager.components.precreate: ConsoleOut
```

- rtcon でポートを接続する

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=direct --property dataport.dataflow_type=push --property dataport.timestamp_policy=on_write
```

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.interface_type=direct --property dataport.dataflow_type=pull --property dataport.timestamp_policy=on_write
```

- [corba_cdr][pull][new][on_write]

```
rtcon ./localhost/.host_cxt/ConsoleIn0.rtc:out ./localhost/.host_cxt/ConsoleOut0.rtc:in --property dataport.dataflow_type=pull --property dataport.timestamp_policy=on_write
```

#2 - 2017/02/16 10:10 - win-ei

- 担当者を win-ei にセット

- 進捗率を0から100に変更

#3 - 2017/08/30 14:13 - n-ando

- ステータスを新規から終了に変更