RPC Online Maintenance Facility

The RPC Online Maintenance Facility - the CICS transaction `ERXM` - enables you to monitor server activity, start and stop the CICS RPC Server manually and to modify various aspects of its behavior. This chapter covers the following topics:

- Monitoring the RPC Server

- Starting the RPC Server

- Pinging the RPC Server

- Stopping the RPC Server

- Modifying Parameters of the RPC Server

- Activating Tracing for the RPC Server

- Console Commands for the RPC Server

Monitoring the RPC Server

The parameters in the following screens are described under *Configuring the RPC Server*.

≫ **To call the RPC Online Maintenance Facility and display the RPC Broker Parameters**

- Start the CICS transaction

  ```
  ERXM [MEM=erxmain-control-block]
  ```

  where `erxmain-control-block` is the name of the `ERXMAIN` control block. See `ERXMAIN` Control Block under *Customizing the RPC Server*.

  The RPC Broker Parameter map is displayed:

  ```
  11:56:56              --- ERX CICS Online utility  V970.0 ---          06/02/2014
                             RPC Broker Parameter


     Broker parameter
      Broker name     = ETB001
      Class name      = RPC
      Server name     = SRV1
      Service name    = CALLNAT
      User ID         = ERXSRV1
      Code page       =

      Logon           = No                    Server timeout =   600
                                              Encryptionlevel=   0
                                              Compression lvl=   N
      ETBLNK          = CICSETB
  ```

```
   COMMAND ===>
 ==============================================================================
 PF01=Help   03=Exit   04=Control      05=Broker parms     06=Server parms
                       08=Start server 09=Ping server      10=Stop server
```

Press **PF05** from any map to return to the RPC Broker Parameter map.

≫ **To display the RPC Server Parameters**

● Press **PF06** from any map and the RPC Server Parameters will be displayed:

```
   12:03:05            --- ERX CICS Online utility  V970.0 ---         06/02/2014
                          RPC Server Parameter

    Server parameter
     # Min. Workers =    2              Trace Level   = 0
     # Max. Workers =    2              Trace Dest.(TD)= CSSL
     Ending Workers = Never
     Impersonation  = No
     Deployment     = Yes
     Restart Cycles =    3
     SMH Port       =

     Server options =  SVM      AutoSYNC
     Marshal options=

     CICS parameter                     Mapping file  = ERXSVM   (Prefered)
      Memory name   = ERXMAIN  (V900)   Dsn(ENTIREX.SVMDEV.KSDS)
      Transaction ID = ESRV             Opn Add Rea Upd Del


     COMMAND ===>
 ==============================================================================
 PF01=Help   03=Exit   04=Control      05=Broker parms     06=Server parms
                       08=Start server 09=Ping server      10=Stop server
```

≫ **To display the RPC Server Control map**

● Press **PF04**.

```
   12:07:18            --- ERX CICS Online utility  V970.0 ---         06/02/2014
                          RPC Server Control

    MAIN Task
     Status          Running

    WORKER Tasks
     Registered          2
     Busy                0
     Maximum busy        2

    USER Tasks
     Active              0
     Max. active         0

     BrokerId in use:     ETB001
     Class in use:        RPC
     Server Name in use:  SRV1
     Service in use:      CALLNAT
```

```
    COMMAND ===>
  ============================================================================
  PF01=Help   03=Exit    04=Control      05=Broker parms    06=Server parms
                         08=Start server 09=Ping server     10=Stop server
```

≫ **To display help for the RPC Online Maintenance Facility**

● Enter `Help` or press **PF01**.

≫ **To stop the RPC Online Maintenance Facility**

● Enter `Exit` or press **PF03**.

Starting the RPC Server

≫ **To start the CICS RPC Server using the RPC Online Maintenance Facility**

1. Start the CICS transaction `ERXM` to call the RPC Online Maintenance Facility. See also *Monitoring the RPC Server*.

2. Start the server with the **PF08** key or with the command `start`.

   The status of the `MAIN` task (see RPC server control panel) changes to "is running". The defined number (see `ERXMAIN` macro parameter `MINW`) of worker tasks that are registered is displayed.

If an error occurred and the CICS RPC Server is not correctly registered in the broker, but the number of currently active worker tasks is not zero:

● Check with CICS command `CEMT INQUIRE TASK` whether server instances are already running. If yes, stop them using native CICS commands.

● Verify the server parameters matching your system requirements. See column 2 of table under *Configuring the RPC Server*.

● Then issue command `start` or use **PF08**.

Pinging the RPC Server

≫ **To ping the CICS RPC Server using the RPC Online Maintenance Facility**

1. Start the CICS transaction `ERXM` to call the EntireX RPC Online Maintenance Facility. See *Monitoring the RPC Server*.

2. Issue the command `ping` or use **PF09**.

Alternative Method

● Use the `ping` command from the console. See *Console Commands for the RPC Server*.

Stopping the RPC Server

> **To stop the CICS RPC Server using the RPC Online Maintenance Facility**

1. Start the CICS transaction `ERXM` to call the RPC Online Maintenance Facility. See *Monitoring the RPC Server*.

2. Issue the `stop` command or use **PF10**. This ensures correct deregistration from broker and all worker tasks are shut down.

Modifying Parameters of the RPC Server

With RPC Online Maintenance Facility commands, CICS RPC Server parameters can be temporarily modified. Modifications are lost if CICS is restarted. The purpose of the commands is to try out easily new configurations. For persistent modifications (setup) of the CICS RPC Server, reassemble the `ERXMAIN` Control Block using the `ERXMAIN` Macro.

> **To modify the CICS RPC Server parameters using the RPC Online Maintenance Facility**

1. Start the CICS transaction `ERXM` to call the EntireX RPC Online Maintenance Facility. See *Monitoring the RPC Server*.

2. Use the appropriate RPC Online Maintenance Facility command to modify the parameters. See the column 2 of table under *Configuring the RPC Server*.

Activating Tracing for the RPC Server

> **To switch on tracing for the CICS RPC Server using the RPC Online Maintenance Facility**

A prerequisite to switch on tracing is a valid defined trace destination. We recommend defining it permanently, see `ERXMAIN` macro parameter `TRC1`.

1. Start the CICS transaction `ERXM` to call the EntireX RPC Online Maintenance Facility. See *Monitoring the RPC Server*.

2. Use the command `tracelevel=`*`tracelevel`*, where *`tracelevel`* is one of `None`, `Standard`, `Advanced` or `Support`. See `ERXMAIN` macro parameter `TRLV`.

   Example: `tracelevel=Standard`

   To evaluate CICS RPC Server return codes, see *EntireX RPC Server Return Codes*.

Console Commands for the RPC Server

The RPC Online Maintenance Facility `ERXM` can be used directly from a z/OS console using the z/OS command `MODIFY /F`. In the command syntax below:

- *`cics-name`* is the name of the CICS job

- *erxmain-control-block* is the name of the ERXMAIN Control Block. It can be omitted if the default name ERXMAIN is used.

- No blanks are allowed in the string provided to ERXM, for example
  MEM=*erxmain-control-block*,CMD=...

≫ **To start the CICS RPC Server from a z/OS console**

- Use the following z/OS modify command:

  F *cics-name*,ERXM [MEM=*erxmain-control-block*,]CMD=START

≫ **To ping the CICS RPC Server from a z/OS console**

- Use the following z/OS modify command:

  F *cics-name*,ERXM [MEM=*erxmain-control-block*,]CMD=PING

≫ **To stop the CICS RPC Server from a z/OS console**

- Use the following z/OS modify command:

  F *cics-name*,ERXM [MEM=*erxmain-control-block*,]CMD=STOP

≫ **To switch on tracing for the CICS RPC Server from a z/OS console**

- Use the following z/OS modify command:

  F *cics-name*,ERXM [MEM=*erxmain-control-block*,]CMD=TRACELEVEl=*tracelevel*

  For *tracelevel*, see *Activating Tracing for the RPC Server*.