



# ***Eurex US Release 1.0***

## **Front End Operations Guide**

© EUREX 2003

U.S. Futures, L.L.C. (Eurex US), a Delaware limited liability company, is a subsidiary of U.S. Exchange Holdings, a Delaware company. Eurex US will apply at the U.S. Commodity Futures Trading Commission (CFTC) for recognition as a Designated Contract Market (DCM) in accordance with U.S. law. Eurex US will apply at the UK Financial Services Authority (FSA) for recognition as an Overseas Investment Exchange (OIE) in accordance with UK law. Eurex US must be designated as a DCM by the CFTC before it may commence trading. Furthermore, Eurex US must be designated as an OIE by the FSA before it may carry out regulated activities in the UK.

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof are owned by Eurex US and its affiliates and subsidiaries including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication Eurex US and its respective servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party's use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information only and shall not constitute investment advice. This brochure is not intended for solicitation purposes but only for use as general information. All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Until the branding is communicated, "Eurex US" only constitutes a working title for U.S. Futures, L.L.C.

---

## Table of Contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
<b>1.1</b>	<b>Purpose</b>	<b>4</b>
<b>1.2</b>	<b>Organization of this Guide</b>	<b>5</b>
<b>1.3</b>	<b>Scope of the Guide</b>	<b>5</b>
<b>1.4</b>	<b>Prerequisites</b>	<b>7</b>
<b>1.5</b>	<b>Other Reference Documents</b>	<b>7</b>
<b>1.6</b>	<b>Exchange related Terms</b>	<b>7</b>
<b>2</b>	<b>System Overview</b>	<b>8</b>
<b>2.1</b>	<b>Multiple Environments</b>	<b>8</b>
<b>2.2</b>	<b>XEUS related Files</b>	<b>8</b>
<b>2.3</b>	<b>Broadcast Overview</b>	<b>9</b>
2.3.1	Public Broadcast	10
2.3.2	Private Broadcasts	10
<b>3</b>	<b>XEUS Operations</b>	<b>12</b>
<b>3.1</b>	<b>XEUS Submenu Structure</b>	<b>12</b>
<b>3.2</b>	<b>MISS Operations</b>	<b>13</b>
3.2.1	XEUS Service Management	15
<b>3.3</b>	<b>Configuration</b>	<b>17</b>
3.3.1	Configuration Management	17
3.3.2	Platform and Environment Specific Path Definitions	19
3.3.3	User Path Name Limitations	21
<b>3.4</b>	<b>Report Handling</b>	<b>21</b>
3.4.1	Report Node Assignment	22
3.4.2	Subscription of third party private broadcast streams	22
<b>3.5</b>	<b>Workstation Operations</b>	<b>23</b>
3.5.1	Operating the Workstation	23
<b>4</b>	<b>Appendix A - System Configuration</b>	<b>24</b>
<b>4.1</b>	<b>Enhanced Multicast Configuration</b>	<b>24</b>
4.1.1	Multicast Split Filter	27
<b>4.2</b>	<b>Configuration File XEUSmbr.ini</b>	<b>28</b>
<b>4.3</b>	<b>Configuration File xeussublist.dat</b>	<b>32</b>
<b>5</b>	<b>Appendix B – Glossary</b>	<b>34</b>

# 1 Introduction

## 1.1 Purpose

This guide is intended to provide support for the operation and maintenance of the Eurex US 1.0 front end. The "Front End Operations Guide GATE 3.2" describes procedures and tools to help operate GATE (Generic Access To Exchanges). The "Front End Operations Guide Eurex US" is intended to operate and maintain Eurex US. Both guides are written for people with general system administration skills.

The procedures defined in this guide should be followed exactly to ensure the proper functioning of Eurex US 1.0. General system and network environments are not discussed here. This guide provides the instructions and the information necessary to execute the required procedures and tasks for Eurex US 1.0. If one of the described procedures or instructions causes an exception or event that is not covered in this guide nor in "Front End Operations Guide GATE 3.2", contact the Eurex US technical help desk. Refer to the trouble shooting and reporting section of the "Front End Operations Guide GATE 3.2" for more information.

For Eurex US:

Address:

Eurex U.S. Futures, L.L.C.

tbd.

Eurex US Technical Helpdesk

Phone: tbd.

FAX: tbd.

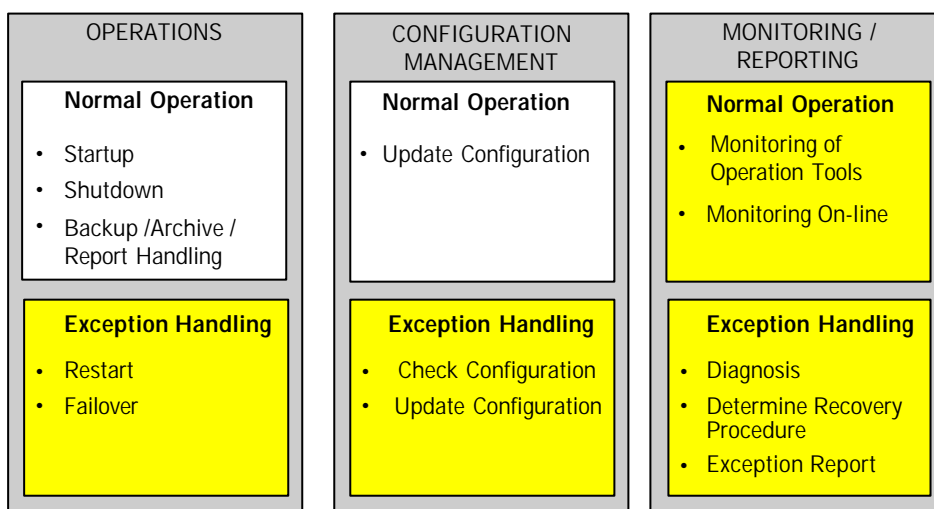
e-mail: tbd.

## 1.2 Organization of this Guide

A system overview is given in chapter 2, "System Overview". This overview provides information on the Eurex US front end system configuration and the software components. Chapter 2 also provides a general overview of the system and the terms used in this guide.

Explanations of the operating activities are provided in chapters 3, 4 and 5 corresponding to the two functional domains shown in the diagram below. Normal operation is the normal activities of standard day-to-day operations of the Eurex US front end. Exception handling is not within the scope of this guide. Information on the handling of front end architecture exceptions is contained in the "Front End Operations Guide GATE 3.2".

The shaded parts of the following diagram are not in the scope of this guide.



Functional domains

References to specific appendix sections are given in most chapters. Use these references to find more information on the topics discussed. For exception handling, see the "Front End Operations Guide GATE".

## 1.3 Scope of the Guide

This guide focuses on the functional Xervice Eurex US named XEUS. The instructions in this guide apply to the Sun Solaris and Windows platforms. To address platform specifics, comments are added where necessary. Table 1.3 lists the main groups of components and shows whether or not they are in the scope of this document. The table also lists related documents for each of the component groups.

Component Group Name	Description	In Scope of this Guide	Related Documentation
GATE Front End Technical Services	Front end software components built and released by the exchange, including the tools built to operate the system, excluding the functional Services, the exchange front end trading application and the VALUES API 3rd party software.	No	"Front End Installation Guide GATE 3.2", "Front End Operations Guide GATE 3.2"
Functional Services	Processes of the exchange front end systems based on GATE	Yes	"Eurex US Front End Installation Guide", "Eurex US Front End Operations Guide" (this manual)
Exchange provided Front End Application etc.	Exchange front end applications based on the functional Services	No	"Eurex US @X-ceed Trading System User Guide"
VALUES API	Virtual Access Link Using Exchange Services; Application Programming Interface  Exchange front end application and member built applications use the VALUES API to access exchange services.	No	"Member Front End Development Guide"
System hardware	Member-provided system hardware Workstations, servers Routers LAN/WAN networks	No	Vendor provided documentation, "Common Sizing Guidelines", "Common Network Setup"
System software	Member provided system software Operating system	No	Operating system manuals, "Common Sizing Guidelines"

Table 1-3 Front end hardware and software components

## 1.4 Prerequisites

The GATE 3.2 front end software on the MISS and WS must be fully installed and configured (as described in “Front End Installation Guide GATE 3.2”) before the tools and procedures described in this guide can be used. The Eurex US 1.0 application software on the MISS and WS must be fully installed and configured (as described in the “Eurex US Front End Installation Guide 1.0”) before the tools and procedures described in this guide and in the “Front End Operations Guide GATE 3.2” can be used.

The functional Xervices can start only when GATE is running. See “Front End Operations Guide GATE 3.2”.

The reader should be familiar with the operational tasks of GATE.

For the Eurex US version 1.0 printing facilities, a valid printer must be installed on the MISS/Workstation.

## 1.5 Other Reference Documents

The following is a list of other documents referenced in this operations guide, which the reader should find useful:

“Front End Installation Guide GATE 3.2”

“Front End Operations Guide GATE 3.2”

“Eurex US Front End Installation Guide 1.0”

“@X-ceed Eurex US Trading User Guide 1.0”

## 1.6 Exchange related Terms

The terms *exchange*, *trading system*, *trader account* and *trader group*, etc. within this technical guide are used in a generic, technical-oriented way, which does not take account of additional functional classifications as clearing and settlement.

## 2 System Overview

The Eurex US front end architecture is based on the GATE architecture, which acts as a service provider for one or more exchange services – the so called Xervice – (i.e. a subset of exchange specific processes) for a specific environment (simulation/production). A GATE installation, which provides services for more than one Xervice, is referred to as a multi market installation.

The central administration Tool for the GATE architecture as well as for the Xervices is the Xmenu. The Eurex US Xervice submenu of the Xmenu provides the integration of Eurex US related operations such as:

- Start and stop Eurex US, including preprocesses such as file transfers
- Display status of the Eurex US Xervice (XEUS) and processes
- Schedule jobs
- Expand reports
- Configuration of broadcast subscription

The trading application @X-ceed and third party applications are referred to as front end applications. @X-ceed is the exchange front end GUI application, which use the VALUES API to communicate with the Eurex US back end. The GUIs are implemented exclusively in Java. @X-ceed is installed together with the Eurex US software. For more information, refer to the following documents:

Installation: "Eurex US Front End Installation Guide 1.0"

Operations: "Eurex US Front End Operations Guide 1.0" (this manual)

Using @X-ceed: "@X-ceed Eurex US Trading User Guide 1.0"

### 2.1 Multiple Environments

GATE and Eurex US can run in multiple environments concurrently. An environment is a complete installation of GATE and the Xervice XEUS for production or simulation purposes. The directories are:

/opt/gate/base90/ for the XEUS 1.0 production environment

/opt/gate/base91/ for the XEUS 1.0 simulation environment

### 2.2 XEUS related Files

GATE and XEUS use several files to store important configuration and logging information.



## **ROB Files**

There are several files created on the MISS related to Recoverable Broadcast (ROB) streams. The ROB log file contains all recoverable broadcast data. These files are XEUS internal and should not be used by any other application, but the internal broadcast data can be accessed via the XEUS Retransmission Xervice. The ROB files only exist on the MISS.

## **Configuration Data Files**

Three configuration data files store settings for the XEUS functional and retransmission Xervices:

### **MemberINI File**

The XEUSmbr.ini file stores member specific information. For the configuration details of this file, refer to chapter 4.2.

### **Subscription File**

The MISS subscribes to broadcast streams sent from the back end. The subscription file on a MISS, the xeussublist.dat file, holds a list of streams, which are to be subscribed. This is described in sections 2.3 and 4.3.

### **Reference Data File**

During the Eurex US back end batch processing at the end of each trading day, the reference data file is uploaded to the MISS. This ensures the consistency of the reference data file on the MISS and on the Eurex US back end. The reference data file contains both functional and technical information.

### **Report Files**

Report files contain information from previous trading days. The Eurex US back end creates the report files during the batch process at the end of each trading day. The files are uploaded in a compressed format to the MISS before the start of the new trading day. Reports are also available in raw data format.

## **2.3 Broadcast Overview**

Eurex US provides specific information to the front end systems via broadcasts. This section provides general information on broadcasts, their subscriptions and their recoverability. Detailed information about the information contained in those stream can be found in sections 4.3.

Depending on the type of information, broadcast streams are either public (market data) or private member specific (e.g. order and trade confirmations). The different broadcast streams are also differentiated by their delivery quality. Unreliable information is delivered once and cannot be re-captured by the front end, if it is missed. Recoverable information can be re-captured on the front end via re-transmission requests. A full list of the broadcast streams and their classifications is provided in the following sections. The back end will broadcast only those streams which are subscribed by the MISS.

Recoverable Broadcasts (ROB) are stored in special log files located in the "ROB" directory, on the MISS (e.g. ...\\XEUS\data\ROB). The date of these files is checked automatically during the MISS startup procedure. To avoid using ROB files from the previous day, these files are deleted during each "Start of Day" for the XEUS Xervices.

### 2.3.1 Public Broadcast

There are two types of public broadcast streams in XEUS: public unreliable and recoverable broadcast (ROB) streams.

Broadcast Stream Type	Content
Public, unreliable	Single / double leg inside market
Public, recoverable	Back office information

Table 2.3.1: XEUS public broadcast message types

#### Public unreliable streams

Public unreliable streams include single leg options/futures market information, double leg combination option and futures market information, ticker/underlying information, news and product state changes.

#### Public recoverable streams

Public recoverable broadcast streams are sent for settlement prices, capital adjustments, contract change, margin parameter, product change, exchange rate, series price change and status messages. The different XEUS stream types are combined into one public recoverable stream called ROB Info.

### 2.3.2 Private Broadcasts

There are two types of private streams for XEUS: private unreliable streams and private ROB. The following table summarizes the related private broadcast streams on MISS based front ends:

Broadcast Stream Type	Content
Private group, unreliable	Quote confirmation / strategy quote confirmation / execution confirmation
ROB (private)	Trade / order confirmation / private strategy order confirmation

Table 2.3.2: XEUS private message types

### Private unreliable streams

Own (combination) quote update and mass quote hold streams are sent as private, unreliable streams. There are two quote confirmation streams, one for single leg quotes and one for double leg quotes. Furthermore the private strategy quote confirmations are sent via an unreliable broadcast stream.

### Back office streams (ROB)

The private ROB stream is provided on MISSes as a private recoverable broadcast. It contains trade and order confirmations. Furthermore the private strategy order confirmations are sent via a recoverable broadcast stream.

### 3 XEUS Operations

The member operational staff performs activities to control the Eurex US front end during normal and anomalous operation includes startup, shutdown and exception handling. The following sections provide graphical overviews and detailed process descriptions of the activities.

Normal operations of XEUS Xervice comprise startup, shutdown of MISS and Workstation components, configuration management, report handling and archiving. These operations activities are described in more detail in the following sections. Exception handling is not specifically covered in this guide. Refer to the “Front End Operations Guide GATE” or “Eurex US User Manual – System Overview” for information on exception handling.

#### 3.1 XEUS Submenu Structure

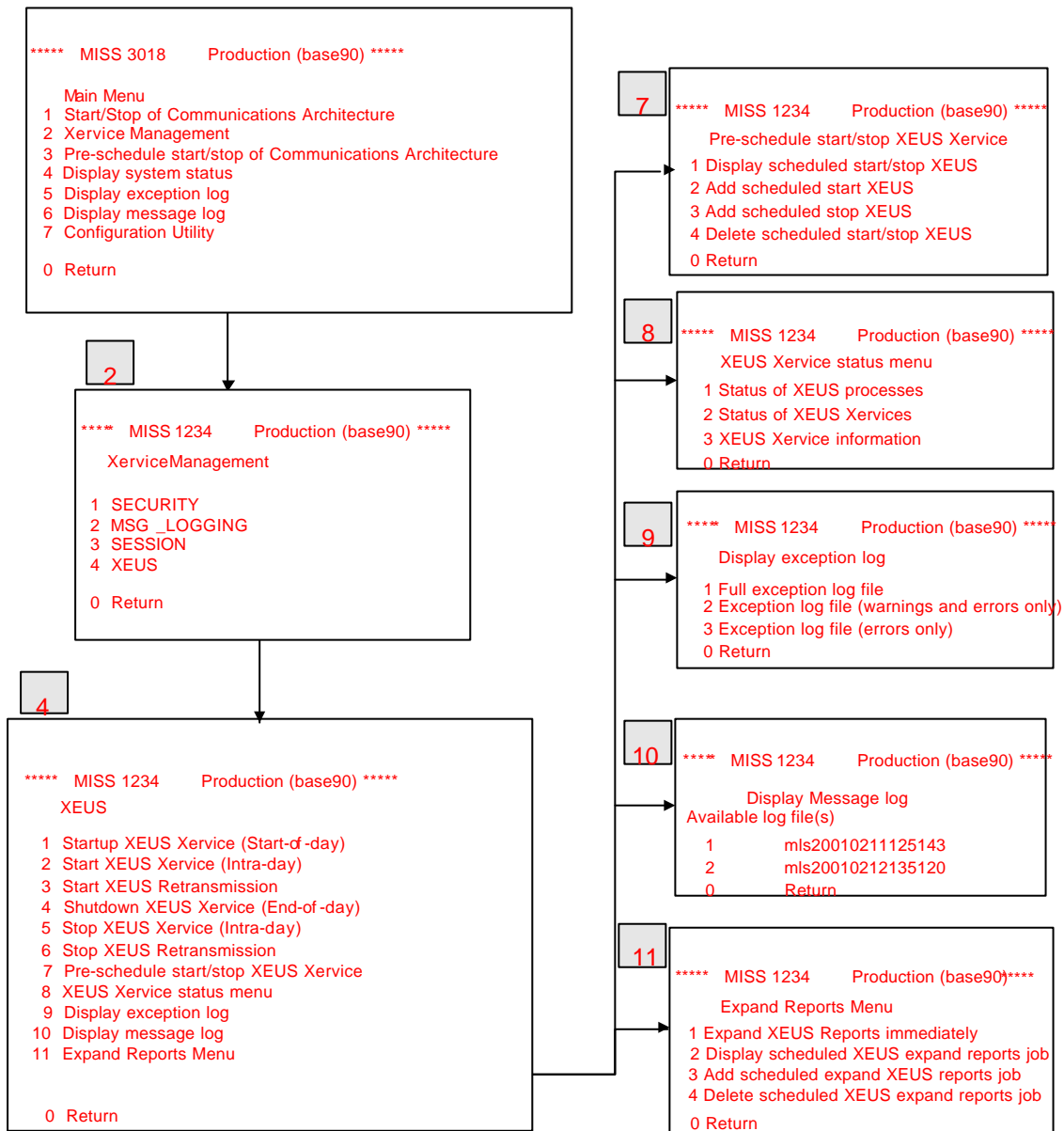
This section describes the sub-menus of XEUS and how to access them. The entry point on the MISS is the main menu of GATE (Xmenu). It is accessed via command line or by double clicking on the *XmenuR32* icon:



XmenuR32

The Xervice management section is the entry point to manage the products running on GATE. The XEUS operations sub-menu (menu item <4> XEUS) provides Xervice specific operations for startup, shutdown, monitoring and maintaining Eurex US.

The following illustration is an example subset of the XEUS sub-menus:

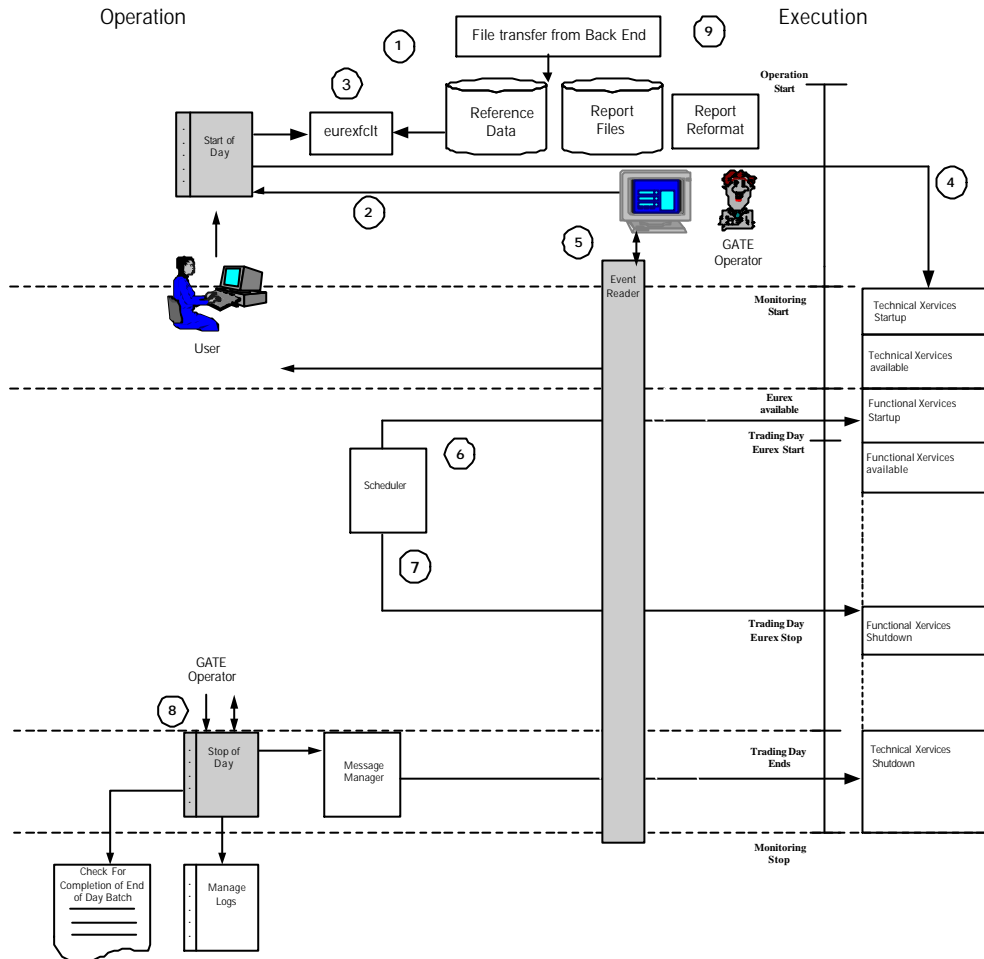


Example XEUS sub-menu

### 3.2 MISS Operations

The activities necessary to start XEUS are explained using a graphical overview and systematic instructions.

Each step is numbered, indicating the sequence of the XEUS Service startup.



Normal operation MISS

### Scenario Walkthrough

The new reference data file is sent from the back end to the MISS overnight (1).

The GATE operator on the MISS starts GATE from the Xmenu, invoking the start of day script (2). This causes the availability manager to perform the technical Xervices startup. XEUS is then started from the XEUS submenu of Xervice management. Alternately, the AutoStart flag of [XEUS.Properties] located in the XEUSmbr.ini file can be set to "1". Setting this flag to "1" starts the XEUS Xervice automatically when GATE starts.

The ROB log files are deleted. If XEUS finds a valid reference data file, no additional actions are necessary. If XEUS does not find the reference data file, it calls the file client (xeusfclt) to request a new reference data file from the XEUS back end (3). If the reference data file is invalid, the existing reference data file is erased and a new reference data file is requested from the back end during the "Start up XEUS Xervice (Start-of-day)" from the XEUS sub-menu.

With the presence of a new reference data file in the XEUS file transfer directory, a new trading day has been started.

The Start-of-Day Script starts Xervices in the background. Depending on the platform, computer performance and network traffic, the startup procedure on the MISS may take some time (4). The availability of a Xervices is checked using the “Display system status” sub-menu.

The XEUS operator on the MISS starts the event reader manually or via the Xmenu using a separate terminal window to monitor the local log file of the MISS. The event reader displays log entries of the exception log file on the screen (5).

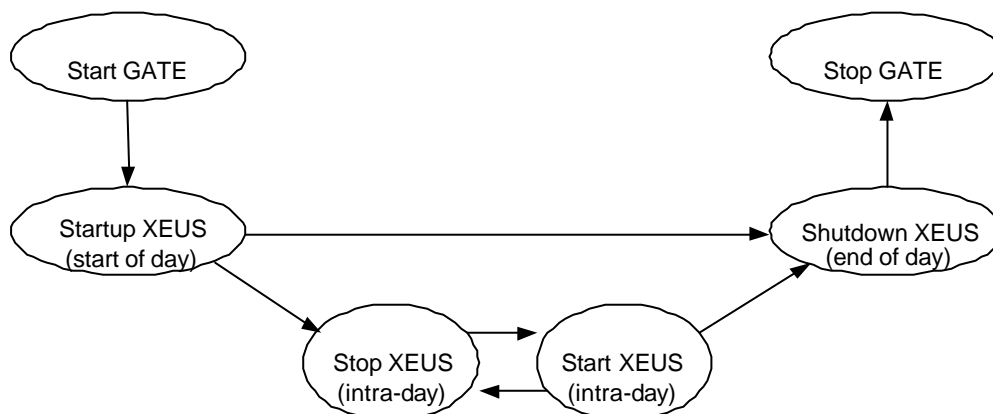
The Xmenu provides a means of scheduling the start and stop of XEUS. The actual scheduler is part of the operating system and executes jobs at predefined times (6) (7).

The end of day script stops the Xervice XEUS (8). After the trading day, when the back end is in batch mode, the report files are generated and sent from the back end to the MISS. (9)

For exception handling, refer to the “Front End Operations Guide GATE”.

### 3.2.1 XEUS Xervice Management

The following procedures require a running GATE architecture. The following state transition diagram gives an overview of the relation of the different start / stop procedures.



Start / stop state transitions

#### 3.2.1.1 Start up XEUS Xervice (Start of Day)

This menu item does one of the following two things:

if XEUS Xervice is available, this stops and restarts the Xervice

if XEUS Xervice is not available, this starts the Xervice

The “Start up XEUS Xervice (Start-of-day)” command is the initial start for the trading day. The process first checks to see if the reference data file has been successfully transferred overnight from the back end. It then decompresses and copies this file to the XEUS/data/active subdirectory.

If there is no reference data file in the file transfer subdirectory, the file client (xeusfclt) requests a re-transfer from the back end and the compressed reference data file is transferred to the file transfer directory.

The XEUS BESS is then started, establishes a connection to the back end allowing a back end login using the @X-ceed or other VALUES based applications.

If the back end is not available, the command will automatically try to restart the XEUS Services after some time, where the number of restart attempts and the delay between them is configurable using the Configuration Utility or manually setting the *Restarts* and *RestartDelay* entries in the *[XEUS.Properties]* section of the XEUSmbr.ini file.

#### **3.2.1.2 Start XEUS Xervice (Intra-day)**

This command re-starts the XEUS Xervice during the trading day, it also checks the business day and signature of the ref.dat file and sends retransmission requests for missing ROBs. "Start XEUS Xervice (Intra-day)" starts the XEUS functional Xervices, establishing a connection to the back end via the XEUS BESS.

"Start XEUS Xervice (Intra-day)" is used after a failure of the XEUS Xervice or after a "Stop XEUS Xervice (Intra-day)" is performed. Use "Start up XEUS Xervice (Start-of-day)", described above, for the initial start-up each day.

#### **3.2.1.3 Start XEUS Retransmission Xervice**

This command starts the XEUS retransmission Xervice. The retransmission Xervice can be started at any time, regardless of the XEUS Xervice and back end states.

#### **3.2.1.4 Shutdown XEUS Xervice (End-of-day)**

This command performs the end of day jobs. After "Shutdown XEUS Xervice (End-of-day)", "Start XEUS Xervice (Intra-day)" does not work until "Start up XEUS Xervice (Start-of-day)" is executed again.

#### **3.2.1.5 Stop XEUS Xervice (Intra-day)**

This command is used for the intra-day stop. It does not execute the end of day jobs like "Shutdown XEUS" does, but it shuts down the XEUS BESS.

#### **3.2.1.6 Stop Retransmission Xervice**

The XEUS retransmission Xervice can be stopped any time, regardless of the XEUS Xervice.



### **3.2.1.7 Pre-schedule start/stop XEUS Xervice**

This command schedules the starting and stopping of the XEUS functional Xervice.

The scheduling services of the operating system are used to perform this function. On Sun Solaris systems the cron daemon is used; on Windows the task scheduler service.

### **3.2.1.8 XEUS Xervice status menu**

This sub-menu shows whether processes or the XEUS Xervices are available or unavailable. "XEUS Xervice Status Menu" corresponds to "Display System Status Menu" and is the XEUS specific part. For further information, refer to the "Front End Operations Guide GATE 3.2".

### **3.2.1.9 Display exception log**

This sub-menu shows the exception log, filtered for XEUS operations and severity levels. The following is a list of security levels:

- all events of XEUS operation including successfully started processes (severity 0)
- all events of XEUS operation which produce warning and errors (severity 1)
- all events of XEUS operation which produce errors (severity 2)

A severity level of 3 triggers an alert.

### **3.2.1.10 Display message log**

This menu displays the XEUS specific message logs.

### **3.2.1.11 Expand reports menu**

This menu contains the commands used to expand the reports or to schedule the report expansions for execution at a later time.

## **3.3 Configuration**

### **3.3.1 Configuration Management**

After a new installation, the customer needs to start the Configuration Utility, as described in the "Eurex US Front End Installation Guide 1.0". (This will not be necessary, if a future Eurex US release allows to update an existing Eurex US 1.0 installation.)

The following configuration files are provided for storing the configuration information of the front end system. Members should not change three of these files: configsys.ini, GATEsys.ini and XEUSsys.ini. These three files are protected with a checksum and the GATE architecture does not start if they are modified. The other files must be adapted to member needs: configmbr.ini, XEUSmbr.ini and xeussublist.dat

Note: The configuration files configsys.ini and configmbr.ini are described in the "GATE Front End Operations Guide 3.2".

The following configuration activities refer to the member configuration file XEUSmbr.ini. The activities to be performed are explained in a systematic description, with examples. The command syntax corresponds to the UNIX platform (Sun Solaris). Windows command syntax is in braces. Any text editor may be used to change these files. The editor used is referred to by the EDITOR\_NAME variable in this description. The variable has to be replaced by the appropriate name of the editor actually used. It is also possible to change and update the member configuration files using the Configuration Utility.

#### Step 1 - Edit member configuration file (on a MISS):

To have the functional Xervice XEUS start when GATE starts, update the MISS configuration by changing the AutoStart entry in section *[XEUS.Properties]* in *XEUSmbr.ini* from "0" to "1". This file is in the "cfg" directory of XEUS. Refer to Appendix A *System Configuration*.

In the production environment:

```
>cd /opt/gate/base90/XEUS/cfg           {on Windows cd <GATE_drive:>\base90\XEUS\cfg}
>EDITOR_NAME XEUSmbr.ini              {the same on Windows}
```

In the simulation environment:

```
>cd /opt/gate/base91/XEUS/cfg           {on Windows cd <GATE_drive:>\base91\XEUS\cfg}
>EDITOR_NAME XEUSmbr.ini              {the same on Windows}
```

**Note:** Make a copy of the XEUSmbr.ini before making any changes.

#### Step 2 - Update member configuration file on MISS or WS:

Save the updated XEUSmbr.ini file and exit the editor.

If there is more than one MISS, the updated XEUSmbr.ini file must be copied to the other MISSes. The updated XEUSmbr.ini should also be copied to all WS.

**Note:** If there is more than one MISS, consistency of configuration files between MISSes is critical.

#### Step 3 - Testing new configuration:

Perform tests on the newly configured functional Xervices. The changes only take effect when the functional Xervices are stopped and restarted on the front end systems involved. An intra-day start is sufficient to apply the changes. Changes in the system entries have to be checked after modifying the front end configuration.

**Note:** Changes in the operating system (SUN Solaris/Windows) of the MISS must be communicated to Eurex US to be able to connect. Only change the WAN IP addresses of the MISSes when so advised by the Technical Helpdesk.

### 3.3.2 Platform and Environment Specific Path Definitions

Platform independent information is provided by this guide wherever possible (see also “Front End Operations Guide GATE”). For this reason, this guide uses the variables XX (GATE) and YY (XEUS) to represent the different Deutsche Börse exchange environments. The following section describes the directory structure on a MISS. For Windows the forward slash “/” is replaced with a backslash “\”. This applies to the following examples:

Platform	Entry Point
Windows	<GATE_drive:> \opt\gate
SUN Solaris	/opt/gate

Table 3.3.1: GATE Entry Point

Directory	Description and Contents	S u n	W I N	M I S S	W S
/transferdir	File transfer directory	X		X	
	For Windows the “transferdir” directory is not used. Instead, a common file transfer root directory as setup for the Windows FTP server is used.		X	X	
/transferdir/ refdatYY	Reference data transfer directory for XerviceYY environment YY. For production YY is 40 -> refdat40 For simulation YY is 41 -> refdat41	X	X	X	
/transferdir/ reportsYY	Report transfer directory for XerviceYY	X	X	X	
/transferdir/ releaseYY	Kit/Usim transfer directory for XerviceYY	X	X	X	
/baseXX	Technical services directory tree for GATE Environment XX. For production XX is 90 -> base90 For simulation XX is 91 -> base91	X	X	X	X

Directory	Description and Contents	S u n	W I N D O W S	M I S S I L E	W S
/baseXX/bin	Shared libraries, executables, script files, shared library libxeususim.dll (Windows)	X	X	X	X
/baseXX/XEUS	Contains subdirectories for all specific executables and data for external Xervice	x	x	X	X
/baseXX/XEUS/bin	for XEUS application, BESS and unzip executables	X	X	X	X
/baseXX/XEUS/cfg	XEUSmbr.ini XEUSsys.ini  Broadcast subscription files: xeussublist.dat	x X	x X	x X	X X
/baseXX/XEUS/data	Xervice specific data files, including mmlogin.dat and mmstreams.dat	x	x	x	
/baseXX/XEUS/data/ROB	Recoverable broadcast log and status files	x	x	X	
/baseXX/XEUS/data/active	Directory containing the active reference data file (initially empty)	x	x	X	
/baseXX/XEUS/data/archive	Directory containing the archived reference data file(s) (ref.dat) (initially empty)	x	x	X	
/baseXX/XEUS/GUI	Subdir containing all specific executables and data for the trading GUI	X	x	X	X
/baseXX/icons	Bitmaps for all icons used:	X	X	X	X
/baseXX/lib	Contains the shared library libxeususim.so (SUN Solaris)	X		X	X
/baseXX/logs/ uilogs	Location of the exception log file directories containing UI_ETR_NNNN.log (for trading) and	X	X	X	X
/baseXX/ VALUES	Values programming environment entry point (header files and libraries).	X	X	X	X
/baseXX/VALUES /include	Values Call Interface (VCI) header files:	X	X	X	X

Table 3.3.2: Sub-directories under platform specific entry points

### 3.3.3 User Path Name Limitations

In some cases there have been problems reported with path variables containing spaces. This could be the case in the profile paths specified by the environment variables %HOMEDRIVE% and HOMEPATH% (Windows) and \$HOME (SUN Solaris).

The values contained in the path variables %SETTINGSPATH% and %EXPORTPATH% (Windows) and \$settingspath and \$exportpath (SUN Solaris) must not contain spaces.

When specifying these environment path variables DO NOT leave spaces between the file names e.g. "Program Files" should be "ProgramFiles".

### 3.4 Report Handling

During back end batch processing, reports are generated on the host and transferred via the CS to the destination MISS. The destination MISS is the report node specified by the member (please see also chapter 3.4.1 *Report Node Assignment*). The MISS does not initiate any report transfer.

The CS transfers all of the files to subdirectories of the file transfer directory. The target directory for the transfer is the base of the directory hierarchy of reportsYY, where YY is the environment number. The reports are named RPT+Report-ID or RAW+Report-ID. They are stored in a subdirectory with a 16-digit combination of current and effective business date in the member specific subdirectory (e.g. reports40/ABCFR/2003040320030403). For raw data file layouts, see the "Eurex US Member Interface Specifications – File Interface Layouts" document.

The reports are delivered to the MISS in compressed form. In the submenu "Expand reports", there is a command to expand the reports (please see also chapter 3.2.1.11 *Expand reports menu*). First, the script decompresses the reports, then a reformatting module formats the reports so they can be printed from the appropriate MISS platform.

Report reformatting can be scheduled in the sub menu "Expand Reports", or processed immediately via the XEUSExpandReports script. The operator is responsible to ensure that the operating system scheduling is active, if these jobs are to be scheduled.

XEUSExpandReports reads the environment and member information from the configuration file.

The following are the three states of a report (extension based on a standard/non-product specific report):

Inputfile.cli	Delivered, compressed report in Back End format
Outputfile.txt	Decompressed report in MISS platform format (filename RPT*.txt and RAW*.txt)
Inputfile.inc	An error occurred whilst the file was transferred to the MISS. This file is incomplete.

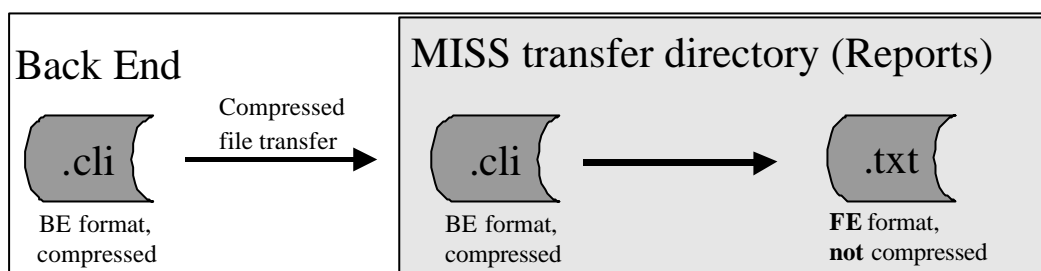


Figure 3.4 Compressed file transfer

Backing up, purging and archiving reports is a member task since these depend on the member's internal auditing requirements and archiving needs. At the MISS there is no automatic retransmission of reports if the transfer of reports has been unsuccessful. The security administrator can request historical reports to be resend. These historical reports are sent after the next batch.

### 3.4.1 Report Node Assignment

A member may specify up to two report nodes. Member reports are downloaded to these nodes daily, during the Eurex US batch processing. Eurex US assigns them on the back end at the request of the member.

Normally, a member's report node is one of the MISSes owned by that member. It is possible to assign a node owned by a member, or a service provider, as the report node of another member. It is also possible to assign the same physical MISS node as the report node of more than one member.

Reports are delivered on the MISS in the reports subdirectories of the transferdir (see table 3.3.2).

### 3.4.2 Subscription of third party private broadcast streams

Normally, members are only authorized to subscribe to their own private broadcast streams. Depending on existing clearing relationships, clearing members are authorized to subscribe to the recoverable private trade confirmation stream of their clients.

It is possible to authorize a member or service provider to subscribe to one or more private broadcast streams of a different member. Eurex US provides this authorization upon a member request. To receive these streams, the authorized member has to add them to his MISS subscription lists (xeussublist.dat). See Appendix A *System Configuration* of this document for more information.

### **3.5 Workstation Operations**

#### **3.5.1 Operating the Workstation**

On a WS there is no Xmenu to handle operations. On a WS there are four shortcuts available for the user. The first shortcut starts up GATE. The second is used to launch the trading application @X-ceed. @X-ceed is stopped by selecting the entry "exit" in the pull down menu "Window" of the "Eurex US Trading System" menu. The third shuts down the GATE system on a WS and thereby the connection to the MISS system(s).

Alltogether the following four shortcuts are available for Eurex US 1.0 on a Workstation:

- "StartGateR32"-icon starts the communication links with the MISS
- "Start XEUS 1.0 Trading"-icon starts the Java-based Eurex US trading application
- "StopGateR32"-icon stops the communication links with the MISS

## 4 Appendix A - System Configuration

Besides the GATE configuration files, XEUS is configured via the XEUSmbr.ini member configuration file. This file is composed of several sections, each with a number of entries.

Entries in the XEUS system configuration XEUSsys.ini file on the other hand are pre-set by the exchange and cannot be changed. Entries in the member configuration files should only be changed if adaptations to the member environment are required.

The XEUS binaries and configuration files are installed in the following subdirectories

/opt/gate/base90/XEUS/... (for production)

/opt/gate/base91/XEUS/... (for simulation)

The user profiles for the Trading GUI – storing user specific Trading GUI settings – are installed by default in the home directory of the locally logged on user. The Trading GUI user profile are named by the following convention:

<MemberID><TraderID>.<Environment ID>.<GUI ID>.<Exchange ID>.cfg

An Example name for a Eurex US 1.0 production Trading GUI user profile for the member ABCFR and Trader ID TRD001 would be:

ABCFRTRD001.P.ETR10.XEUS.cfg

### 4.1 Enhanced Multicast Configuration

GATE performs the distribution of private and public broadcast data (e.g. trade prices, order confirmation, etc.) between MISSes and Workstations, i.e. on the member's LAN side, via the IP Multicast protocol (see also the *Common Front End Technical Overview*). Thereby GATE distributes different types of broadcast data through different broadcast streams, e.g. trade confirmation broadcast data through stream no. 8.

The following XEUS broadcast streams are available (for the list of back end broadcast streams see chapter 4.3 *Configuration File xeussublist.dat*):

XEUS Stream Types	VALUES ID	Back End Code
SUBSCRIBE_INTERNAL_STREAM_1	1	-
SUBSCRIBE_INTERNAL_STREAM_2	2	-
SUBSCRIBE_SINGLE_LEG_INSIDE_MARKET	3	X
SUBSCRIBE_DOUBLE_LEG_INSIDE_MARKET	4	X
SUBSCRIBE_PRODUCT_STATE_CHANGE_INFORMATION	5	X
SUBSCRIBE_TICKER	6	X
SUBSCRIBE_MARKET_SUPERVISION_INFORMATION	7	X
SUBSCRIBE_TRADE_CONFIRMATION	8	A



<b>XEUS Stream Types</b>	<b>VALUES ID</b>	<b>Back End Code</b>
SUBSCRIBE_SINGLE_LEG_ORDER_CONFIRMATION	9	B
SUBSCRIBE_DOUBLE_LEG_ORDER_CONFIRMATION	10	C
SUBSCRIBE_PUBLIC_BOF_INFORMATION	11	F
SUBSCRIBE_SINGLE_LEG_QUOTE_CONFIRMATION	12	T
SUBSCRIBE_DOUBLE_LEG_QUOTE_CONFIRMATION	13	U
SUBSCRIBE_BROADCAST_GAPS	14	-
SUBSCRIBE_SINGLE_LEG_ORDERBOOK_DEPTH	15	R
SUBSCRIBE_EXECUTION_CONFIRMATION	16	V
SUBSCRIBE_INTERNAL_STREAM_18	18	-
SUBSCRIBE_STRATEGY_INSIDE_MARKET	19	X
SUBSCRIBE_STRATEGY_ORDER_CONFIRMATION	20	D
SUBSCRIBE_STRATEGY_QUOTE_CONFIRMATION	21	S

Table 4-1: XEUS Stream Types

These broadcast streams are assigned to one or more multicast groups (=multicast addresses), these assignments are configured within the XEUS member configuration file *XEUSmbr.ini*, thus defining which stream type is distributed through which multicast group.

After a default installation of the GATE and Eurex US front end software, all stream types are assigned to one default multicast group, which is configured within the GATE configuration file *configmbr.ini*; however, more than one multicast group can be defined, thus providing a multicast group pool for broadcast stream type assignments.

Members, who want to change the default multicast configuration to separate the broadcast stream distribution within their LAN, can use the Configuration Utility (see *Eurex US Front End Installation Guide 1.0* for usage).

Start the Configuration Utility:

```

***** Configuration Utility *****

Configuration Menu

1  MISS/WS Architecture Configuration
2  Multicast Configuration
3  GATE Configuration
4  XEUS Configuration

0  Return

```

Select menu item <2> Multicast Configuration.

```

***** Configuration Utility *****

      Multicast Configuration

1  List Multicast Groups
2  Add Multicast Group
3  Remove a Multicast Group
4  Assign XEUS Streams to Multicast Groups

0  Return

```

Select menu item <1> to list existing multicast groups, <2> to add a multicast group or <3> to remove a multicast group from your GATE configuration.

Select menu item <4> to assign XEUS broadcast streams to previously defined multicast groups:

```

***** Configuration Utility *****
      Assign XEUS Streams to Multicast Groups

1  Set one Multicast Address for all XEUS Streams

2  SUBSCRIBE_INTERNAL_STREAM_1_____ [224.1.0.0]
3  SUBSCRIBE_INTERNAL_STREAM_2_____ [224.1.0.0]
4  SUBSCRIBE_SINGLE_LEG_INSIDE_MARKET_____ [224.1.0.0]
5  SUBSCRIBE_DOUBLE_LEG_INSIDE_MARKET_____ [224.1.0.0]
6  SUBSCRIBE_PRODUCT_STATE_CHANGE_INFORMATION_____ [224.1.0.0]
7  SUBSCRIBE_TICKER_____ [224.1.0.0]
8  SUBSCRIBE_MARKET_SUPERVISION_INFORMATION_____ [224.1.0.0]
9  SUBSCRIBE_TRADE_CONFIRMATION_____ [224.1.0.0]
10 SUBSCRIBE_SINGLE_LEG_ORDER_CONFIRMATION_____ [224.1.0.0]
11 SUBSCRIBE_DOUBLE_LEG_ORDER_CONFIRMATION_____ [224.1.0.0]
12 SUBSCRIBE_PUBLIC_BOF_INFORMATION_____ [224.1.0.0]
    vvvvvv      vvvvvv

0  Return

u/d  line up/down      uu/dd  page up/down

```

After assigning GATE multicast groups to XEUS broadcast streams, you can save your configuration and leave the Configuration Utility:

```

***** Configuration Utility *****

      Multicast Configuration
      Configuration Menu

1  MISS/WS Architecture Configuration
2  Multicast Configuration
3  GATE Configuration
4  XEUS Configuration

0  Return

Please Select:
Do you want to save the changes in the configuration files and exit?

y => save and exit
n => no save but exit
c => just continue

y(es)/n(o)/c(ontinue): Y

```

Please note that the enhanced multicast configuration can be checked for correctness using the tool *cocheck*, see *Front End Operations Guide GATE Appendix C Configuration File Consistency Checker "cocheck"* for usage.

#### 4.1.1 Multicast Split Filter

Starting with GATE 3.2 network bandwidth can be saved by introducing a more flexible multicast group assignment based on the Xervice (e.g. XEUS), stream type (e.g. Single Leg Order Confirmation) and Member ID *split filter* (e.g. ABCFR). The new split filter assignment is defined within the XEUSmbr.ini and has the following layout:

```
[XEUS.<StreamGroup>.SplitFilter]
<Splitfilter index>, <MemberID>, <multicast index>
```

The field <Streamgroup> must contain a valid streamgroup ID as defined in the [XEUS.StreamGroups] section within the XEUSmbr.ini, the field <Splitfilter index> is an arbitrary but unique value, the field <multicast index> must match a multicast group index as defined in the GATE configuration file configmbr.ini.

A separate section has to be defined for each stream group, but each section can contain several split filter assignments.

#### Example for Split Filters (XEUS Single Leg Order Confirmation):

```
[XEUS.9.SplitFilter]
1, ABCFR, 11
```

Please note that the multicast split filter configuration is not supported by the Configuration Utility, it needs to be configured manually within the XEUSmbr.ini file.

## 4.2 Configuration File XEUSmbr.ini

The table below describes the entries in the XEUSmbr.ini file. These sections are related to the operations architecture. The entries are taken from a production version, environment 40. Simulation entries have 41 instead of 40. The entries refer to the values entered during installation or are system defaults.

Section Name	Entries	Description
[Misc]	Version=10	XEUS version entry
[XEUS.MISSes]	MISS_HOSTNAME	Fill with list of those MISS LAN hostnames used for the GATE connection, one per line
[XEUS.Properties]	AutoStart = 1 Installation = 1	Set AutoStart to 0 if the XEUS Service should not be started automatically
	RefdatDir = ../XEUS/data/active/	Path to the active XEUS reference data file
	RefdatArchiveDir = ../XEUS/data/archive/	Path to the archived XEUS reference data file
	CSInfoFile = ../XEUS/data/csinfo.dat	Location and name of CS-Info file
	FileClient = ../XEUS/bin/xeusfclt	Location and name of the file client tool
	RequestFile = ../XEUS/data/DRIV_app_ridInfo.dat	Path and name of the request file
	Fcx = ../XEUS/bin/xeusfcx	Path and name of a tool for file transfer and decompression purposes
	Unzip = ../XEUS/bin/unzip	Path and name of a tool for decompression purposes

Section Name	Entries	Description
	RefdatFTDir = ../transferdir/refdatYY/ Windows: \\inetpub\ftproot\refdatYY	Path to the XEUS tables file; to be customized for Windows only
	ReportsFileTransferDirectory = ../transferdir/reportsYY/ Windows: \\inetpub\ftproot\reportsYY	Path to the XEUS reports; to be customized for Windows only
	Restarts = 6	Number of XEUS FE automatic restarts if the first attempt to start is unsuccessful, default value is 6, enter 0 to disable restarting
	RestartDelay = 15	Delay between restart attempts, in minutes; default value is 15, minimum value is 3
[XEUS. BcastAuthorization]	SubscriptionAuthorization = 0	0 = no broadcast validation, 1 = broadcast validation
	MultiMemberLoginFile = ../XEUS/data/mmlogin.dat	Input file for retransmission; mandatory if SubscriptionAuthorization = 1
	MultiMemberStreamFile = ../XEUS/data/mmstreams.dat	Input file for broadcast subscription and retransmission requests; mandatory if SubscriptionAuthorization = 1
[XEUS. WanHostNames]	MISS_HOSTNAME, LOGICAL_DEVICE_ID, WAN hostname, deviceId,	Replace MISS_HOSTNAME by the WAN hostname (for MISSes with only one IP address the name is identical to the LAN hostname), used for XEUS Xervices.

Section Name	Entries	Description
[XEUS_RETRANSMISSION.MISSes]	MISS_HOSTNAME	Fill with list of those MISS LAN hostnames that should be used for the Xervice XEUS_RETRANSMISSION (usually identical to [XEUS.MISSes] ) – entries separated by newlines.
[XEUS_RETRANSMISSION.Properties]	AutoStart = 1 Installation = 1	Set AutoStart to 0 if the XEUS retransmission Xervice should not be started automatically.
	MessageFile = ../XEUS/data/XEUR_msg.dat	Location and name of the message file
[XEUS_WAN_TRANSPORT_MANAGER]	Executable = ../XEUS/bin/xeuswan	Path and name of WAN transport manager
	lpcListenport = 1@@51	Port used by the WAN transport manager
	BroadcastServerListenport = 1@@52	Port used by the broadcast server
[XEUS_APPLICATION_MANAGER]	Executable = ../XEUS/bin/xeusam	Location and name of the application manager module
	lpcListenport = 1@@50	Port used by the application manager
	DataServerListenport = 1@@56	Listenport for the data server module
[XEUS_BROADCAST_SERVER]	Executable = ../XEUS/bin/xeusbcsvr	Path and name of the broadcast server module
	LpcListenport = 1@@54	Port used by the broadcast server
	MissGroupId = m	This value must be identical for all MISSes within a MISS group.
	MemberId = ABCFR	XEUS member ID authorized to connect to Eurex US back end (5 uppercase characters)

Section Name	Entries	Description
	BcsrvBessToBessPort = 1 @ @58	Port used by the broadcast server
	RobDataPath = ../XEUS/data/ROB/	Path to ROB-files
[XEUS_BROADCAST_RETRANSMITTER]	Executable = ../XEUS/bin/xeusbrt	Path and name of the broadcast retransmitter
	BrtBessPort = 1 @ @10	Port used by the broadcast retransmitter
[XEUS_DATA_SERVER]	Executable = ../XEUS/bin/xeusds	Path and name of the XEUS data server
	BrtBessPort = 1 @ @11	Port used by the XEUS data server
[XEUS. StreamGroups]	; enter stream types and assign a valid multicast index ; stream type, multitask index ; multicast index must be defined in configmbr.ini 1, multicast index 2, multicast index 3, multicast index 4, multicast index 5, multicast index 6, multicast index 7, multicast index 8, multicast index 9, multicast index 10, multicast index 11, multicast index 12, multicast index 13, multicast index 14, multicast index 15, multicast index 16, multicast index 18, multicast index 19, multicast index 20, multicast index 21, multicast index	Broadcast stream groups to multicast index assignments

Section Name	Entries	Description
[XEUS.<StreamGroup>.SplitFilter]	Splitfilter index, <MemberID>, multicast index	Optional section(s): assign member-specific streamgroup and (unique) split filter to separate multicast index
[XEUS_RETRANSMISSION.StreamGroups]		This section must exist, but has to be empty

Table 4-2: Sample XEUSmbr.ini

### 4.3 Configuration File xeussublist.dat

A member can subscribe from the Eurex US back end the following VALUES API broadcast streams, which are described in the next section.

Broadcast stream	Type	Code
Recoverable trade confirmation	Private	A
Recoverable single leg order confirmation	Private	B
Recoverable double leg order confirmation	Private	C
Recoverable broadcast	Public	F
Recoverable strategy order confirmation	Private	D
Unreliable strategy quote confirmation	Private	S
Unreliable single leg quote confirmation	Private	T
Unreliable double leg quote confirmation	Private	U
Unreliable execution confirmation	Private	V
Unreliable inside market broadcast	Public	X
Unreliable order book broadcast	Public	R

Table 4-3: Subscription Types and Marks

The letters in the column "code" represent the code that has to be inserted in the xeussublist.dat file.

The xeussublist.dat file is used to define the broadcast streams to be received. The xeussublist.dat is an ASCII table that can be edited with any text editor. It is also possible to change and update the member configuration files using the Configuration Utility. All entries must be upper case. A typical xeussublist.dat sample is provided below. Note that ABCFRA includes the member ID (ABCFR\_) and the broadcast stream code (\_\_\_\_A).



ABCFRA

ABCFRB

ABCFRC

ABCFRD

ABCFRS

ABCVRT

ABCFRU

ABCFRV

XXXXXF

XXXXXR

XXXXXX

Notice that for the public recoverable broadcast stream, the member name must be "XXXXX". For the "X" stream, the member name is not relevant; thus, it needs to appear only once in the subscription list.

The xeussublist.dat file is initialized during the installation process of the functional Xservice. See "Front End Installation Guide Eurex US" for detailed information on the installation process. If a member wants to change the broadcast streams he receives, this file must be modified. The changes are applied by adding or deleting entries of the xeussublist.dat file using any text editor. It is also possible to change and update the member configuration files using the Configuration Utility.

## 5 Appendix B – Glossary

Term	Explanation
API	Application Programming Interface
Application request	Function called from the application on the front end to the back end, i.e. each function of the application. There is one application request for each piece of server-based application processing.
Authorization concept	The concept of resource access levels.
Availability manager	The availability manager is responsible for the start-up and shutdown of technical services components.
AVM	See "Availability manager".
Back end	Central host cluster that performs the processing of the business functions. The exchange maintains it.
BESS	Back End Specific Subsystem
BESS application manager	Handles the transformation of messages from the front end format to the back end format and back.
Brcrec	See "Broadcast receiver".
Brcrepub	See "Broadcast republisher".
Broadcast	A broadcast is a data stream that transfers its information asynchronously to a VALUES API based application.
Broadcast receiver	The broadcast receiver is responsible for receiving broadcasts from the republisher.
Broadcast republisher	The broadcast republisher is responsible for forwarding broadcasts from the exchange applications to the broadcast receiver using IP multicast.
Broadcast retransmitter	Gets the required broadcast from the cache and retransmits the lost broadcast to the requestor.
Broadcast server	Gets the broadcast from the back end and forwards the broadcast to the republisher and the cache.
Call interface	The VALUES call interface is a set of technical functions, which are invoked to request processing from exchange applications. The call interface supports connection management, session management, request/response processing and broadcast delivery.
Cocheck	Tool to check sections and entries in all configuration files.

<b>Term</b>	<b>Explanation</b>
Communication server	Link (entry point) between member MISS and exchange back end.
Configuration data files	Configuration database for technical services.
CS	See "Communication server".
End of day script	Script that provides all necessary steps that is performed to shut down the system. Stops the front end execution architecture on MISS and WS.
Entry point	Platform specific root directory for relevant subdirectories.
Event reader	Tool that reads the exception log file and prints the entries to the terminal and generates an exception log report.
Environment	An environment is a complete installation of the technical Xervices for production or simulation purposes, e.g. 90 = GATE production.
Exchange front end application	Front end applications, e.g., @X-ceed.
Exception code	Unique number for each exception.
Exception log file	The exception log file contains the exception information generated by the processes on the MISS and WS when exceptions occur.
Exception report	Report that has to be completed by the operator in case of exceptions.
Fail-over	Concept to ensure high system availability, fail-over can be automatic (no action of the operator necessary) or manual.
FCLT	File CLient: Software component for transferring data between communication server and MISS.
Front end applications	Applications started on WS and MISSes of traders.
Front end operations guide	A reference guide where required information about the operation of GATE can be found.
Front end security manager	Front end security manager is responsible for authorizing of connections to the Xervices.
Front end software	All software at the front end including operating system, networks and exchange software.
Front end system	Hardware and software of the front end.
FTP	File Transfer Protocol.
Functional Xervice	Xervices of the trading systems (XEUS, Retransmission).

<b>Term</b>	<b>Explanation</b>
GATE	Generic Access To Exchange: Common execution architecture.
Graphical User Interface (GUI)	Graphical User Interface is delivered to all members by the exchange for trading.
IP multicast	Routing technique that allows IP traffic to be sent from one source or multiple sources and delivered to multiple destinations.
LAN	Local Area Network. The high availability configuration needs two LAN segments: the router to MISS LAN and the MISS to WS LAN.
LAN transport client	The LAN transport client is responsible for the transport of request/response messages between the WS and the MISS via the TCP/IP protocol.
LAN transport server	The LAN transport server is responsible for the transport of request/response messages between the MISS and the WS via the TCP/IP protocol.
LANTC	See "LAN transport client".
LANTS	See "LAN transport server".
Link	A link denotes the network connection between a Workstation and the MISS. It is established during startup of the Workstation architecture.
Log manager	Process that moves and ages the current log files of a trading day; the end of day script invokes it.
Log report	Report file generated by the event reader, contains the entries of the log file in text format.
Menu	Xmenu for technical operations.
Message log file	Log file containing GATE technical services messages.
Message logger	The message logger is responsible for logging messages for audit trail purposes. The message logger process writes the messages to the message log file.
Message manager	Tool that sends messages to the GATE technical services. Messages are defined by command line parameters.
MISS	A MISS (Member Integration System Server) is a computer system which is connected to the exchange applications. The MISS is responsible for the presentation of market information and capturing of the user requests for the exchange application.
MLS	See "Message logger".

<b>Term</b>	<b>Explanation</b>
MMG	See "Message manager".
Network (IP) address	Specific address for a machine to identify it as unique in the LAN.
Non-clearing member	A trading member who clears via another clearing member.
Operations architecture	Xmenu and operations tools (e.g., EventReader).
Operator control log	Report that has to be completed by the operator during start-up and shutdown of the system.
Private broadcast	Private broadcast is a distribution of information that is considered member specific. This information is sent by request (subscription) only.
Proprietary account	Account used for in-house trading. Trading on own name and own account.
Proprietary trader	Trader trading on proprietary account.
Public broadcast	Public broadcast is a broadcast data stream that is available to all members (after subscription) and contains data like market summary or market details. Different streams exist for different market segments and/or different levels of detail.
Recoverable	A receiver of a recoverable broadcast data stream can capture all data generated while being connected or disconnected to the back end within a one day period.
Reference data file	The reference data file contains functional information (business date, instruments) as well as technical information (e.g. version number).
Report	They contain information about own activities during the last trading day or general information about the last trading day (statistics).
Report files	Report files contain information of the trading. The back end creates the report files during the batch process at the end of a trading day. The files are uploaded to the MISS before the start of the new trading day.
Report formatter	Process to reformat on specified file from back end format to platform specific, printable format.
Report formatting script	Script that checks the file transfer directory for new reports and calls the report formatter for each new file.
ROB	Recoverable broadcast.
ROB log file	File containing recoverable broadcast data.

<b>Term</b>	<b>Explanation</b>
SEC	See "Front end security manager".
SES	See "Session manager".
Session	A session is a relationship between a front end application and a back end system using a single user ID.
Session manager	The session manager provides an interface between the GATE technical services and applications using VALUES API.
Shortcut	A keystroke combination, usually the Control, Alt or Shift keys in conjunction with a regular letter, allowing fast access to a function.
Start of day script	Script that provides all necessary steps that have to be performed to start-up the system.
Subscription	A member is allowed to subscribe to broadcast data streams by submitting a subscription request with the VCI_Subscribe function.
SYS_CONFIG_FILE	Environment variable specifying the path to the configsys.ini configuration file.
TCP/IP	Transport Control Protocol/Internet Protocol.
Technical Xervices	All Xervices without functional Xervices
UI log	See "User interface log file.
User guide (user manual)	A reference book, where needed information about the windows can be found quickly. The guide focuses on the detailed description of the windows and related functionality.
User interface log file	The user interface log file logs user interface events. The number of events that are stored to the log file depends on parameter setting in the technical services configuration.
VALUES API	Virtual Access Link Using Exchange Services: VALUES provides an API (Application Programming Interface) which must be used by all applications to access back end exchange applications.
Wide Area Network (WAN)	Wide Area Network consisting of machines in different locations.
WS	Workstation, i.e., front-end machine for trading user
Xervice	Exchange service provided by architecture processes: GATE → Technical Xervice BESS → Functional Xervice



© Eurex, September 2003

Published by:

Eurex US Customer Support

Deutsche Börse AG / Eurex

US Representative Office

190 South LaSalle, Suite 1720

Chicago, IL 60603

USA

[www.eurexus.com](http://www.eurexus.com)

Order number:

E2E-047-0803

ARBN Number:

Eurex Frankfurt AG ARBN 100 999 764