



RECEPTION DESK & SERVER

RECOMMENDATIONS & MINIMUM REQUIREMENTS



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OPERATING SYSTEM & PC EQUIPMENT REQUIREMENTS & RECOMMENDATIONS

Database Server

- The operating system must be Windows Vista/7/8/10 Professional * or Windows Server 2008**/2012 32/64-bit
- Metra Server software is based on Firebird 2.5.4 (Firebird-2.5.4.26856 Win 32/x64 Firebird) database
- Metra supports and maintains the Firebird database
- Internet Information Services (IIS) must be installed (Install optional Windows component)
- Network must be Transmission Control Protocol/Internet Protocol (TCP/IP), support Domain Name System (DNS)
- Topology must be Ethernet with appropriate network cards and patch cables
- Network must have adequate resources to support the system
- Local updating and maintaining of all computer system drivers and utilities is recommended
- UPS & surge protection with equipment warranty is suggested

**NOTE: Windows Vista/7/8 Professional intentionally feature-limited versions of IIS (simultaneous request execution limit of 10).*

***Windows Server 2008 (x86 or x64) must have SP1 installed to avoid OS caching issues.*

Client Workstation

- The operating system must be Windows Vista/7/8/10 – 32/64-bit
- The web browser must be Microsoft Internet Explorer 8.0 or higher, recommended 11.0, screen resolution 1024x786, 16 bit colour depth or higher
- Network must be Transmission Control Protocol/Internet Protocol (TCP/IP), Support Domain Name System (DNS)
- Topology must be Ethernet with the appropriate network cards and patch cables
- Network must have adequate resources to support system
- Connecting Metra Desktop POS reader, Bill printer and Report printer requires COM, LPT and USB ports
- Local updating and maintaining of all computer system drivers and utilities is recommended
- UPS & surge protection with equipment warranty is suggested

Online Technical Support

- **Remote access to the networks is required:**
 - VPN (Virtual private networking over high speed internet access) is preferred - fast and low usage costs
 - Team Viewer is also acceptable

NOTE:

All networks must be installed and maintained locally!

SERVER HARDWARE REQUIREMENTS

Minimum Configuration:
<ul style="list-style-type: none"> • Operating system Microsoft Windows 7 32-bit Professional* • Installed Microsoft Internet Explorer 8 or latest • Installed Internet Information Server (IIS) • Data base server Firebird 2.5.4
Hardware Requirements
<p>Processor: Pentium 4, >=1 GHz RAM: 1Gb Free space on disk: For Metra SW, DB and backup 10Gb RAID: If hardware RAID controller is present make sure that write cache is enabled Network card LAN: TCP/IP</p>

Recommended Configuration 1:
<ul style="list-style-type: none"> • Operating system MS Windows Server 2008 (also R2) SP1 Standard Edition 32/64-bit • Microsoft Internet Explorer 11 • Installed Internet Information Server (IIS) • Database server Firebird 2.5.4 32/64-bit
Hardware Requirements
<p>Processor: Intel Core i5 or Xeon 2.4 GHz RAM: 8Gb Hard disk: Raid 1 or 5 Free space on disk: For Metra SW, DB and backup 10Gb Network card LAN: TCP/IP UPS: Uninterruptible power supply</p>

Recommended Configuration 2:
<ul style="list-style-type: none"> • Operating system MS Windows Server 2012 R2 Standard Edition 64-bit • Microsoft Internet Explorer 11 • Installed Internet Information Server (IIS) • Database server Firebird 2.5.4 64-bit
Hardware Requirements
<p>Processor: 3.1 GHz (64-bit processor) RAM: 8Gb Hard disk: Raid 1 or 5 Free space on disk: For Metra SW, DB and backup 10Gb Network card LAN: TCP/IP UPS: Uninterruptible power supply</p>

**NOTE: Windows 7 Professional intentionally feature-limited version of IIS (simultaneous request execution limit of 10).*

Database Backup

Database backup is performed by Metra database backup service at a predefined time each day. Default setting is 04:00 AM.

First a backup of the database is created and then it is restored to a new file. If all these procedures are successful, the original database is considered consistent.

The restored file with suffix *.fdb\$OK should be moved to some external or network drive.

For more on the backup cycle see <http://support.metra.si/help/HELP/All/backup.htm>.

CLIENT HARDWARE REQUIREMENTS

Minimum Configuration:	Recommended Configuration:
<ul style="list-style-type: none"> Operating system Microsoft Windows 7 Professional Installed Microsoft Internet Explorer 8 or latest 	<ul style="list-style-type: none"> Operating system MS Windows 10 Professional 64-bit Microsoft Internet Explorer 11
Hardware Requirements	Hardware Requirements
<p>Processor: Intel Core i5 RAM: 8Gb (32-bit) / 8Gb (64 -bit) Free space on disk: For Metra application 10Gb Network card LAN: TCP/IP VGA: 1024 X 768, 16 bit</p>	<p>Processor: Intel Core i5 or equivalent processor RAM: 8Gb Hard disk: 120Gb Free space on disk: For Metra application 10Gb Network card LAN: TCP/IP VGA: 1440 X 900 widescreen, 32 bit</p>

Antivirus and Firewall Software

3rd party antivirus and firewall software can slow down or prevent Metra software to function normally. To avoid it the following steps should be made:

Exclude the following folders from being scanned by the Antivirus software:

- **Folder where the database and the database backup are located**
 - **Example:** "C:\MetraLCC"
- **Metra application folder**
 - **Example (x86 OS):** "C:\Program Files\Metra"
 - **Example (x64 OS):** "C:\Program Files (x86)\Metra"
- **Metra web folder**
 - **Example:** "C:\Inetpub\wwwroot\Metra"
- **Metra application/template data folder**
 - **Example:** "C:\Documents and Settings\All Users\Application Data\Metra"

NOTE: Location of the folder varies from one operating system to another. For exact location see "Template Folder" on the Info page.
- **Firebird application folder**
 - **Example (x86 OS & x86 Firebird):** "C:\Program Files\Firebird"
 - **Example (x64 OS & x86 Firebird):** "C:\Program Files (x86)\Firebird"
 - **Example (x64 OS & x64 Firebird):** "C:\Program Files\Firebird"

NOTE: Running 64-bit operating system does not necessary mean that 64-bit Firebird is installed.

Exclude **LCC*.OCX** files from folder "C:\Windows\Downloaded Program Files" from being scanned by the Antivirus software.

Exclude the following TCP ports from being blocked by the Antivirus/Firewall software:

- **Metra server:**
 - Exclude all ports required for Metra Software operation (ports from 6771 to 6783).

NOTE: Not required if the antivirus software only scans files and does not monitor traffic on TCP ports.

METRA SERVER

System Requirements:

Component	Minimum	Recommended
CPU	Intel Core i5 or equivalent	Intel Core i7 or equivalent
RAM	8Gb	16Gb or Higher
Hard Disk (Free Space)	10Gb	20Gb
OS	Windows 7 or Server 2008	Windows Server 2012

Network:

The server must be able to access the local network that the Metra network controllers are on.

Ideally this means that the server is local, but if a VM is used, connecting via a WAN or VPN should allow it to access the controllers.

If the server can't access the controllers, the lockers will not be able to function.

If the server is remote, connection speed may introduce delays in locker operation.

User Accounts:

We require a local admin account on the server and may need to create additional users.

This is to allow remote management through the Metra web interface.

Software/Remote Access:

We will install a Firebird DMBS and database, Metra Server software and complete all locker configuration on the server.

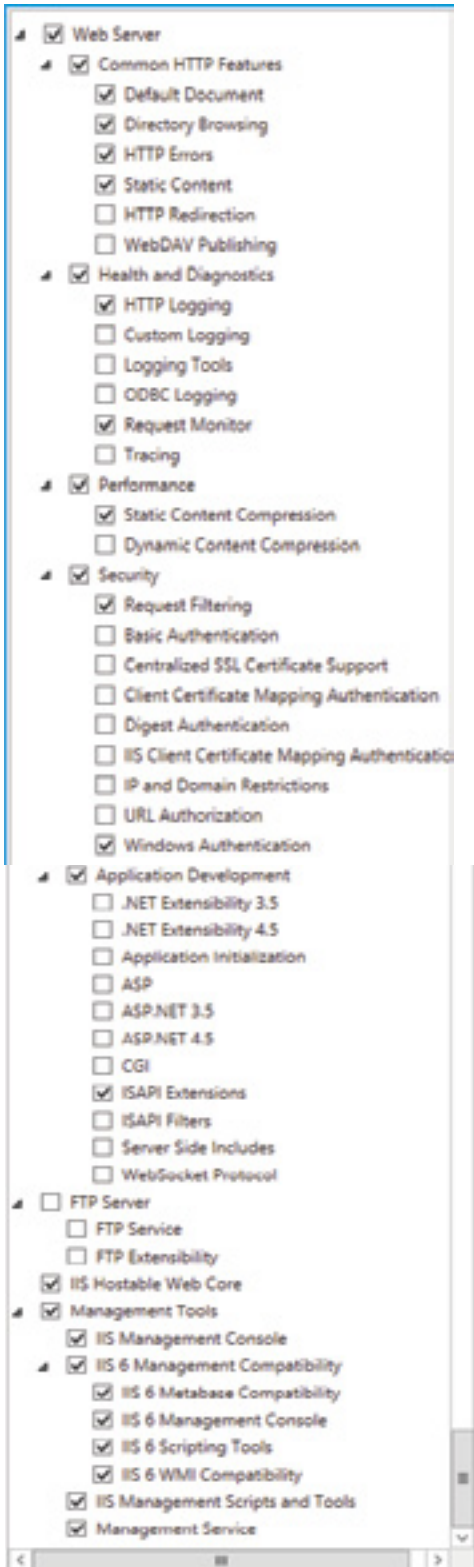
To do this we require access to the server, ideally through RDP details or a VPN, as technicians that do this setup may not be attending your site.

TeamViewer 10 is preferred, or similar would also be sufficient.

If only temporary access is to be granted due to company policy, we will be unable to support or investigate any issues without access being granted, this will cause unavoidable delays in resolving issues.

Metra Server requires the following IIS features to be installed on the server

IIS Requirements. (Server 2012)

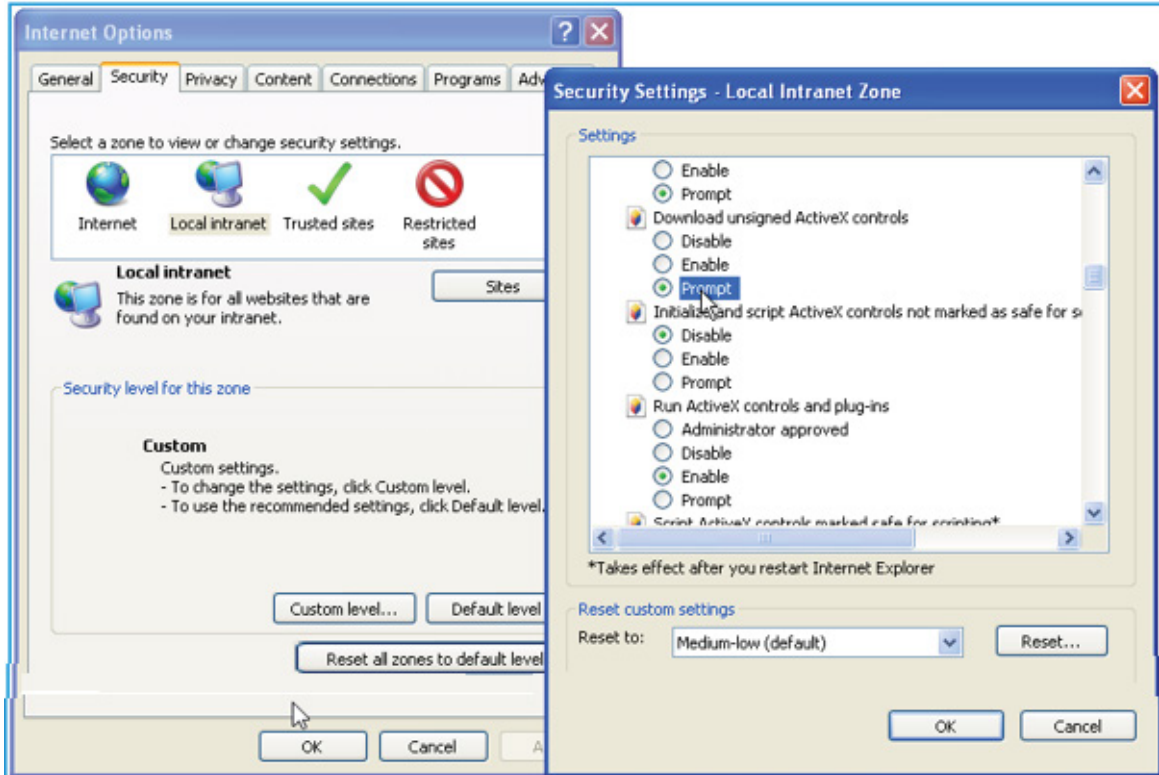


Metra Server requires the following IIS features to be installed on the server

IIS Requirements. (Win 7)

- Internet Information Services
 - FTP Server
 - FTP Extensibility
 - FTP Service
 - Web Management Tools
 - IIS 6 Management Compatibility
 - IIS Management Console
 - IIS Management Scripts and Tools
 - IIS Management Service
 - World Wide Web Services
 - Application Development Features
 - .NET Extensibility
 - ASP
 - ASP.NET
 - CGI
 - ISAPI Extensions
 - ISAPI Filters
 - Server-Side Includes
 - Common HTTP Features
 - Default Document
 - Directory Browsing
 - HTTP Errors
 - HTTP Redirection
 - Static Content
 - WebDAV Publishing
 - Health and Diagnostics
 - Custom Logging
 - HTTP Logging
 - Logging Tools
 - ODBC Logging
 - Request Monitor
 - Tracing
 - Performance Features
 - Dynamic Content Compression
 - Static Content Compression
 - Security
 - Basic Authentication
 - Client Certificate Mapping Authentication
 - Digest Authentication
 - IIS Client Certificate Mapping Authentication
 - IP Security
 - Request Filtering
 - URL Authorization
 - Windows Authentication
 - Internet Information Services Hostable Web Core

Active X Control Configuration for METRA



Metra POS and Remote Management:

Remote management require IE10 or higher to access the Metra Server and for the TCP/ IP addresses to be white listed on the Metra server.

The IP of this machine should be static or reserved in DHCP to ensure that access isn't denied if the IP address changes.

Configuration of the Metra POS software for locker allocation is done through registry keys after the software is installed.

The keys will be included with installation and all 'localhost' entries should be changed to either the METRA Server's IP address or DNS entry.

Metra / Links Port information

Traffic flow is; IN-coming and OUT-going on these ports. (Bi-directional)

METRA DB Server

Port / Application

6771 – Info Server

6772 – Sihot

6773 – TCP /IP Network Controller

6774 – Hlinx

6775 – Metra DB Server

6776 – Metra Messenger

6777 – LCC Network Controller

6780 – Fideleo External Delivery

6781 –

6782 –

6783 -

POS Client

Port / Application

6778 – Metra Info Client / POS Client

6779 – Metra POS service / POS Client

Web interface

Port

80 – Preferred Metra Web interface to server

443 - Can also be used for web interface

LINKS Application (if applicable)

Port

8000

8001

8002

IF externally hosted – i.e. Compass etc.

IP address & Port number ??