



Tech-File Export

Version 3.0 Specification

Production Release

March 17, 2004

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Tech-File Export Version 3.0 Specification

March 19, 2004

The MIMOSA *Tech-FILE* Export V3.0 specification allows a system to provide an XML-based export of tables as defined in the MIMOSA Common Relational Information Schema (CRIS). These tables are needed to link databases together or to move trend data from one database to another.

This specification requires each supplier to provide a MIMOSA Export Utility related to one or more packaged technologies, i.e., Trend-, Dyn-, etc. which will then export an XML file which conforms to the associated *Tech-Doc* XML schema. Export utilities should create only the data applicable to the application – it is not required to support every table relevant to a particular technology. The utility should create a single XML file and place it in a user-defined URL.

Depending on the application, suppliers may or may not export MIMOSA-defined reference data ("type" tables) and associated enterprises, sites, site databases, segments, assets, etc., but should export all user-defined reference data.

Tech-File Export Database Requirements

The supplier of the data supported by the *Tech-XML* Server software must provide the end-user with the ability to supply and maintain the following information. The supplier may provide an external software utility to perform this function. The fields the end-user must have the ability to assign/modify directly are:

Enterprise

Enterprise ID (unsigned 4-byte integer)
 Enterprise Type (4 unsigned 4-byte integers *n.n.n.n*)
 Enterprise User Identifier (character string from 1-254 characters in length)

Site

Site Enterprise ID (unsigned 4-byte integer)
 Site ID (unsigned 4-byte integer)
 Site Type (4 unsigned 4-byte integers *n.n.n.n*)
 Site User Identifier (character string from 1-254 characters in length)
 Site Template? (boolean)

Database

Database Enterprise ID (unsigned 4-byte integer)
 Database Site ID (unsigned 4-byte integer)
 Database ID (unsigned 4-byte integer)
 Database User Identifier (character string from 1-254 characters in length)

Agent

Agent Enterprise ID (unsigned 4-byte integer)
 Agent Site ID (unsigned 4-byte integer)
 Agent ID (unsigned 4-byte integer)
 Agent Type (4 unsigned 4-byte integers *n.n.n.n*)
 Agent User Identifier (character string from 1-254 characters in length)

Segment

Segment Enterprise ID (unsigned 4-byte integer)
 Segment Site ID (unsigned 4-byte integer)
 Segment ID (unsigned 4-byte integer)
 Segment Type (4 unsigned 4-byte integers *n.n.n.n*)
 Segment User Identifier (character string from 1-254 characters in length)

Asset

Asset Originating Enterprise ID (unsigned 4-byte integer)
 Asset Originating Site ID (unsigned 4-byte integer)
 Asset ID (unsigned 4-byte integer)
 Asset Type (4 unsigned 4-byte integers *n.n.n.n*)

Asset User Identifier (character string from 1-254 characters in length)

Measurement Location

Measurement Location Enterprise ID (unsigned 4-byte integer)

Measurement Location Site ID (unsigned 4-byte integer)

Measurement Location ID (unsigned 4-byte integer)

Measurement Location Type (4 unsigned 4-byte integers *n.n.n.n*)

Measurement Location User Identifier (character string from 1-254 characters in length)

Connected to a Segment or Asset? (“S” or “A”)

When generating a new Enterprise, the end-user must have the ability to enter the MIMOSA-assigned Enterprise ID.

When generating new Sites, the end-user must be given the ability to provide to the system an enterprise-unique range of integer ID’s that the software must utilize when creating new sites.

When generating new Databases, Agents, Segments, Assets, and Measurement Locations, the end-user must be given the ability to provide to the system a site-unique range of integer ID’s that the software must utilize when creating new entries.

The supplier must also provide a user interface which allows a user to select certain options which controls the export process. The user interface must contain the following options in some form:

EXPORT TO URL

Use: Specifies the URL where the XML file should be created.

Any existing XML files with identical names will be overwritten.

INCREMENTAL FROM *Start_GMT_timestamp* {UNTIL [*End_GMT_timestamp* || SYSTIME]}

Use: Specifies to filter all rows exported based on the *gmt_last_updated* column value being greater than or equal to the *Start_GMT_timestamp* specified and (optionally) less than the *End_GMT_timestamp*. The term “SYSTIME” refers to the current GMT time. To ease the burden for an end-user calculating the correct Greenwich Mean Time, the system may want to allow the user to enter either GMT or their local time which the system will internally convert to GMT.

LOG FILE URL

Use: Specifies the URL of a log file which will contain informational and error messages.

RESTRICTED TO {MIMOSA Category List} {Filters}

Use: Specifies which categories of data should be exported and the filters to be applied. Categories which could be supported are:

ENTERPRISE
SITE
DATABASE
AGENT
SEGMENT
ASSET
MEASUREMENT LOCATION

The filters which could be supported are:

ENTERPRISE limited to a selected group
SITE limited to a selected group
DATABASE limited to a selected group
SEGMENT limited to a selected group
SEGMENT TYPE limited to a selected group
ASSET limited to a selected group
ASSET TYPE limited to a selected group
MEASUREMENT LOCATION limited to a selected group
MEASUREMENT LOCATION TYPE limited to a selected group
GMT MEASUREMENT EVENT [before *GMT_timestamp* | between
GMT_timestamp1 and *GMT_timestamp2* | since *GMT_timestamp*]

Logical “AND” Combinations of these filters should be allowed.

Optional User Interface Options

The supplier may also provide additional options which are not required nor supported by other suppliers, but may prove to be useful for exports from a supplier’s systems.

#1: COMPRESSED TO [*Zip_File_URL* || AUTOUNIQUE *URL*]

Use: This option specifies the URL of a ZIP file which should contain the resulting XML file. If the ZIP file does not exist, it will be created. The “AUTOUNIQUE” parameter will generate a unique ZIP file in the URL specified. The ZIP files created should use a naming convention which will create files with names which will be listed in timestamp-ascending order when a name-ordered directory listing is performed.

#2: CONFIGURATION NAME *Config_Name* SAVE AS *File_URL*

Use: This option provides a name to this set of parameters and specifies the file URL where the configuration file will be saved. This configuration file will contain the options for performing the export.

**#3: INCREMENTAL FROM [*Start_GMT_timestamp* ||
LAST_CONFIG_EXECUTED_END_TIMESTAMP] {UNTIL
[*End_GMT_timestamp* || SYSTIME]}**

Use: This expanded “INCREMENTAL FROM” function adds the “LAST_CONFIG_EXECUTED_END_TIMESTAMP” option which requires the system to remember the *End_GMT_Timestamp* utilized in the last successful export executed using the same configuration file.

#4: EXPORT TO *XML_File_URL* {AUTOUNIQUE}

Use: This expanded “EXPORT TO” function includes the “AUTOUNIQUE” capability which will automatically generate a unique filename prefix for the XML file which will be created in the URL *XML_File_URL*. The XML file created should use a naming convention which will create files with names which will be listed in timestamp-ascending order when a name-ordered directory listing is performed.

#5: Command Line Execution with Configuration File Specified

Use: This option gives the user the ability to invoke the export from a command