

Tech-File Export Version 2.2 Specification
(Interfaces #912XX22)
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The MIMOSA *Tech-FILE* Export V2.2 specification is an effort to provide a 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 application technologies, i.e., Trend-, Dyn-, etc. which will then export technology-specific tables in an XML file containing elements from CRIS V2.2. A list of the supported tables for each technology are documented in MIMOSA's technology cross-reference matrix (Tech-File CRIS V2.2 Cross-Reference Matrix.doc) file. 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 export utility will create a single XML file which conforms to MIMOSA's published CRIS V2.2 XML Schema Definition (CRIS Complete V2-2.xsd) to a target directory location.

Depending on the application, suppliers may or may not export associated reference data ("type" tables) and associated service segments, assets, sites, site databases, etc., but should utilize all MIMOSA-supplied reference data from the Site 0 reference database whenever possible.

Tech-File Export Database Requirements

The supplier of the databases supported by the *Tech-File Export* software must provide the end-user with the ability to configure and maintain MIMOSA/Site-assigned globally-unique identifiers and user-defined names. The supplier may provide an external software utility to perform this function. The fields the user must have the ability to assign/modify directly are:

Site.site_code

Site.company_name

Site.site_name

Site_Database.db_site

Site_Database.db_id

Site_Database.name

Agent.org_agent_site

Agent.agent_id

Agent.agent_db_site, agent_db_id, agent_type_code (via Agent_Type.name lookup)

Agent.name

Segment.segment_site

Segment.segment_id

Segment.sg_db_site, sg_db_id, sg_type_code (via Segment_Type.name lookup)

Segment.user_tag_ident

Asset.asset_org_site

Asset.asset_id

Asset.as_db_site, as_db_id, as_type_code (via Asset_Type.name lookup)

Asset.user_tag_ident

Meas_Location.meas_loc_site

Meas_Location.meas_loc_id

Meas_Location.ml_db_site, ml_db_id, ml_type_code
(via Meas_Loc_Type.name lookup)

Meas_Location.user_tag_ident

When generating new rows in the Agent, Segment, Asset, and Meas_Location tables, the end-user must be given the ability to provide to the system a site-unique range of integer identifiers (agent_id, segment_id, asset_id, and meas_loc_id, respectively) that the database may draw from 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 *File_Directory_Path*

Use: Specifies the file directory location or 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 *File_Specification*

Use: Specifies the file name or 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:

SITE
DATABASE
AGENT
SEGMENT
ASSET
MEASUREMENT LOCATION

The filters which could be supported are:

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_Specification* || AUTOUNIQUE *File_Directory_Path*]

Use: This option specifies the file name or 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 directory path 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_Specification*

Use: This option provides a name to this set of parameters and specifies the file name or 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_Directory_Path* {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 folder or URL *XML_File_Directory_Path*. 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 line interface, providing the configuration file as a parameter.