MaxiSun Integration Module

OVERVIEW

Sapphire authors a range of powerful interface application modules that link leading financial and business management solutions to third-party business systems and applications.

The integration modules are supplied 'out of the box' – giving you a quick delivery - and can enable scheduling of a range of data transfers between 3rd party business systems and your SunSystems application.

Sapphire authors a powerful interface application module called MaxiSun which contains several modules to link third-party applications to SunSystems 4 & 5. It features a range of inbuilt configuration tools to convert transactional data into double-entry financial data – allowing for automated updates into SunSystems via the Ledger Import or SunSystems Connect (SSC) functions.

MaxiSun is supplied out of the box, and enables scheduling of a range of data transfers between SunSystems and your third-party applications. The data is converted via a series of fully user-definable mappings into a range of data files that conform to the layout of a standard SunSystems database. MaxiSun also offers inbuilt data mapping flexibility at record and field level - meaning it can be easily tailored to fit any configuration and set-up that you may have within your SunSystems installation.

In addition to the transactional data, there is often a requirement to ensure master data (or 'static' or 'reference' data) is continually synchronised between SunSystems and other key business applications and this is provided by the Static Data Module. This module enables you to identify master data in either SunSystems or your secondary application, and map an automatic update into either application dependent upon the desired business process e.g. vendor details – new vendors and changes to existing vendor details, currency exchange rates, new G/L coding etc. The Static Data Update Module enables unlimited data types to be mapped and automated between SunSystems and other third party business applications that have ODBC connectivity and provides for full, multi-directional support.

Each data transfer type can be activated or deactivated on a site by site basis using standard parameters within MaxiSun. The module is easy to use and allows the level of detail to be specified for each data type. Other key business benefits of MaxiSun are outlined below.

- Major reductions in data processing
- Accurate two-way data processing between all your business & finance systems
- Entry of transactional data **once only** into a single application
- Real-time view of your business operations.
- Exceptionally easy to use - requires only a few hours training
- Robust routines guaranteeing data rollback and recovery positions in event of a system failure
- Potential reduction in user count in the finance department

MaxiSun is powered by a powerful central data extraction and conversion programme called Origin. Origin is designed to enable you to add new transaction and data types into the existing menu - without the need for extensive development expertise.

MaxiSun uses Microsoft SQL Server as its configuration setting and data processing database. This ensures fast processing of large volumes of data.

Security

MaxiSun is protected by 128 bit block cipher encrypted user name and password log in. This ensures that only your authorised users can operate and modify the system. This security is Sarbanes-Oxley (SOX) compliant - ensuring secure, controlled and audited access to the interfaced data.

SQL Server

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Automated Operation

The MaxiSun automation tool enables you to run routines or tasks on a scheduled basis (the frequency can even be as often as every second if required). The scheduler can be set-up to send emails with the run log to nominated recipients, and will detail the individual runs, together with the success or failure of any run. Full rollback to pre-run state is standard should a failed run occur.

Powerful Diagnostics

MaxiSun is fully self monitoring and will alert the user if there are any problems during the transfer - right down to which field, of which record, caused issues. In addition, any transactions that are found to contain errors are held back from posting to SunSystems in order that they can be handled appropriately.

Multiple Product Integration

MaxiSun is now capable to integrating as standard with SunSystems 4 & 5. Its flexibility means that a new application can be added to the mapping templates by consultancy, not development. Whatever applications you have in your organisation, if they are operating on an ODBC compliant database then MaxiSun has the potential to interface to them.

MaxiSun - A Functional Guide

MaxiSun has an interface for SunSystems version 4 and 5 – and can include any other third party systems for both transactional and reference data. MaxiSun is designed to handle the automated integration of two data types:

- Reference or Master Data
- Transactional Data

Reference Data

Reference or Master data requires synchronisation between SunSystems and other applications within the integration group. Each type of master data must be identified and decisions made as to which application is the owner of the create/amend/delete process and which application(s) are the recipient(s) of such actions. MaxiSun can handle unlimited data synchronisation processes and will synchronise in any direction - between any application - with ODBC data access.

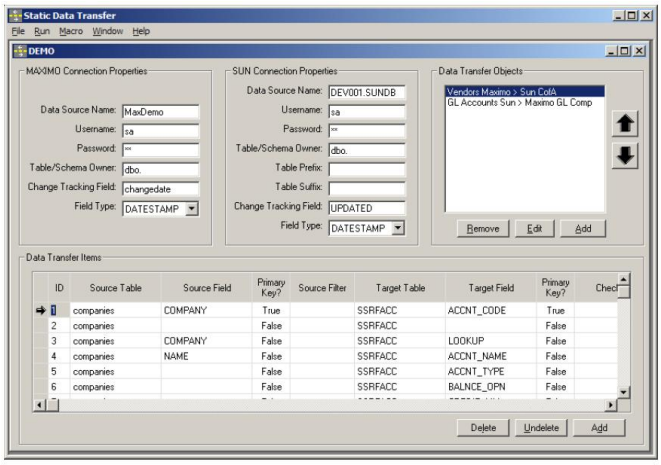
"MaxiSun has proved that it can save considerable time and expense in the data transfer process" ***Bill Hogg, International Power***

Example Reference data types:

- Supplier accounts
- Address records
- Bank account details
- Analysis codes
- Currency codes
- Exchange rates
- Payment indicators

The software interface provides a mapping grid in which the user is able to select which fields in the primary system map to which fields in the destination system. The interface also allows logical operations to be performed at field level – thereby ensuring that virtually any bespoke requirements can be accommodated without modification to the source code.

The Reference Data Transfer configuration grid



Sub-String Operations: For example, a description of 50 characters can be truncated during the interface process to fewer characters or a string of 10 characters can be extracted from the middle of a longer string.

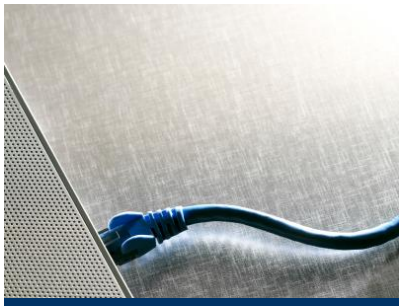
Prefix and Suffix Operations: Any source field can have a fixed set of characters applied to the beginning or end of the string. For example and account code 1234 can be output as V1234.

Macro Operations: The Reference Data Transfer module contains the ability to write full Visual Basic scripting operations against a field to allow ultimate flexibility. For example a date field may require formatting to a given structure. The Macro Editor

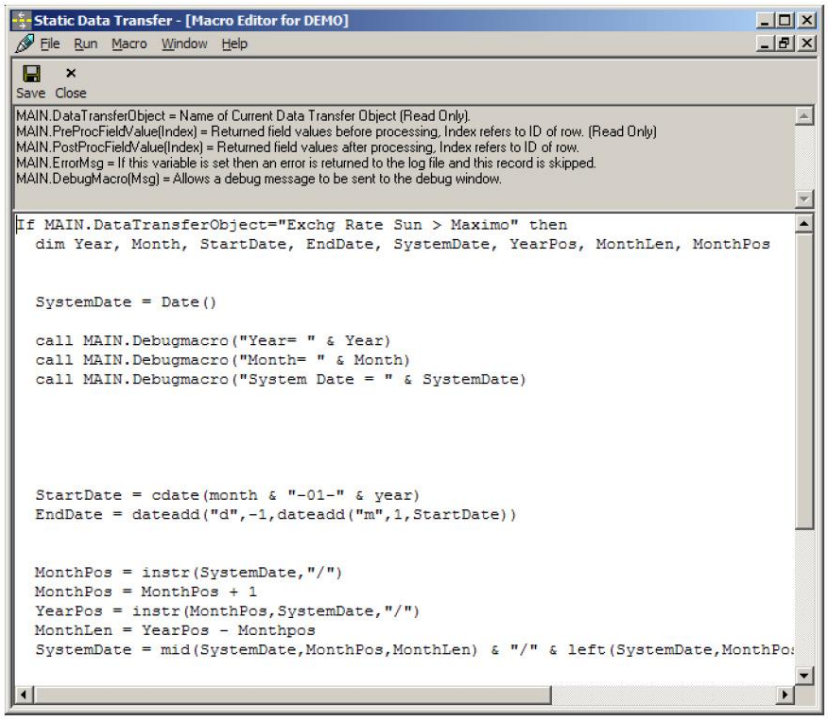
Transactional Data

There are three elements to the transaction data transfer.

- Data Extraction from the source system
- Conversion into SunSystems format
- Validation and Posting



I find that Sapphire's experience and longevity of support is key in supporting the [Maxisun] implementation long term"
International Power



Data Extraction

By querying the source system, Sapphire's Origin Module can be configured by the user to perform SQL type 'SELECT' and 'WHERE' statements. The required output fields can be selected from drop down lists and the relationships between the extracted records can also be defined. Many source business systems do not have complete double entry financial integrity and so the Origin module can handle this by allowing the automated creation of duplicate records whilst reversing the +/- sign of user specified values - thus creating a balancing Debit / Credit pair.

Any number of extraction sets can be defined to extract data from any number of tables in the source system and output records can be formatted in a header and lines configuration with record and field separators as required.

Extracted records can be flagged with an indicator containing the run date and a run number. This field can also be sent to SunSystems as an analysis code therefore making it possible to reconcile exactly the transactions extracted from the source system with those posted into the destination system. An automated post-transfer check routine can perform this reconciliation and any imbalance alerted to a nominated user by email.

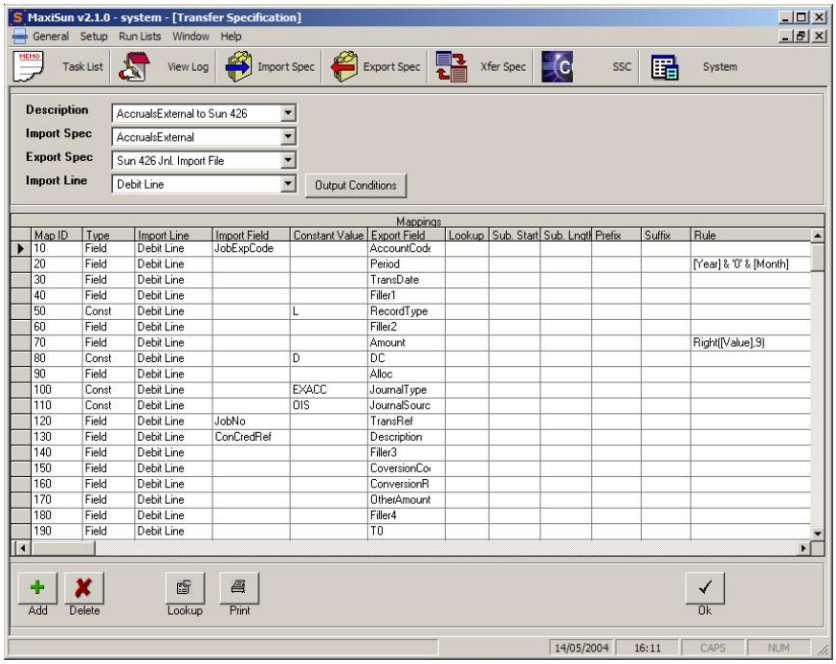
Data Conversion

The Origin module can be used to extract data from a source system in the event that it does not have the native ability to output data. Once the data is prepared it needs to be converted into a specific format for import to SunSystems. SunSystems accepts both a flat file format and an XML format. As with the reference data transfer system, the transactional data can be treated during the conversion process using sub-string, prefix/suffix and Visual Basic macro operations. Additionally MaxiSun provides a lookup table facility which can be used, for example, to convert account codes from one value to another.

"We chose to implement MaxiSun in our power stations, as its data transfer automation tool saves us a significant amount of time that would otherwise be spent in entering data into each system. In addition, as it's automated, MaxiSun allows us to have up-to-date financial information for commitment accounting whenever it's needed."

MaxiSun is configured on the basis of a list of transfer tasks, each one capable of performing an external program call or a data conversion operation or a Post to SunSystems operation. The external program calls can be used to invoke bespoke elements of code allowing for complete customisation and ultimate flexibility in the interface process.

The MaxiSun Conversion Mapping Screen



Validation and Posting

MaxiSun takes prepared data and automatically validates it against the installed SunSystems database - using SunSystem's own import validation rules. Invalid records are rejected and the user is made aware of any problems at field level so that corrective action can be taken. Valid records are automatically posted to the ledgers. Depending on the version of SunSystems, the validation and posting occurs using one of two methods.

With SunSystems 4.2.6 a flat file is produced and MaxiSun launches SunSystems under the control of intelligent, dynamically created macros to perform the import and validation functions.

With SunSystems 5 an XML file is produced and MaxiSun sends this to the SunSystems Connect API via the MS SOAP transport protocol. MaxiSun then receives real-time XML success or failure messages back from SunSystems via the same channel and represent these to the user as intelligent text information.

Automation

MaxiSun acts as the control centre for the reference data transfer and origin modules - calling them into action when required, and performing the data conversions on the resulting files. As MaxiSun can be called either from SQL triggers as the result of database activity in a third party system, or activated periodically on a scheduled basis, a fully automated interface can be created. When running under the scheduler MaxiSun

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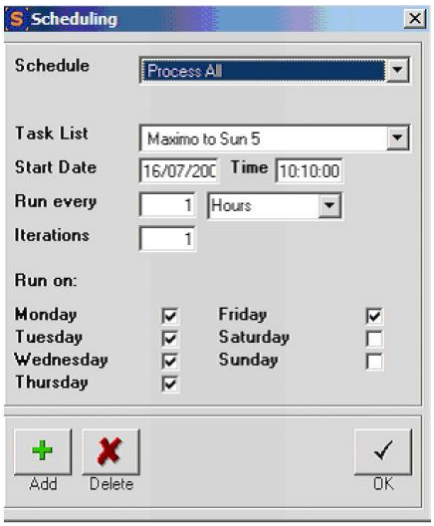
will issue emails to nominated users in the event of any problems occurring. Naturally the process can be initiated manually for complete flexibility.

The MaxiSun Scheduler



Security

MaxiSun is protected against unauthorised user access by username and password credential checking on entry. Data security is also a key factor with MaxiSun. All extracted transactions are flagged in the source system and it is possible to re-extract a selection of previously extracted transactions simply by clearing the flags using a tool such as SQL Query Analyser. Once the extracted data has been read by MaxiSun and converted to SunSystems format, the extracted files are automatically copied to a nominated archive folder providing a further level of data security and auditability.

Sarbanes Oxley Compliance

The latest security encryption functionality ensures Sarbanes Oxley (SOX) compliance for the integration of data between applications – ie secure, controlled and fully audited access to integrated data.

Further Information

For further information on MaxiSun please call our Product Advisory Team on 020 7648 2000 or email them at info@sapphiresystems.co.uk