Multi Line Manager

INTRODUCTION

The Traxeed Multi Line Manager Web is a configurable web-based software solution. It manages data and information for connected Traxeed Line Controllers or Item Experts used in production. The Traxeed Multi Line Manager Web displays actual batch data for each connected production line component, and manages all required data centrally on a server. Besides the communication with the Traxeed Line Controllers or Item Experts, the Multi Line Manager Web also exchanges data with superordinate systems like Arvato CSDB, SAP ATTP, SAP ICH, Tracelink and other ERP or MES.

FEATURES

Common data storage for all connected production lines / machines
- Number of connectable lines: max. 50 (depending on production speed and the amount of aggregation/serialization levels)
- GTIN-based serial number management
- Batch-based storage of serialization/aggregation data
- Batch and time-based alarm history
- User and time-based Audit Trail
- Material / GTIN management
- Production order management

Common configuration management for all connected production lines / machines
- Recipe management
- User management
- Linking of users, user groups and rights in the desired way
- LDAP integration with possibility of changing domain user passwords
- Possibility of viewing and editing all recipes

Automatic request of serial numbers
- Permanent comparison between the available serial numbers and the configured threshold
- Automatic serial number request from superordinated systems if required, depending on global settings or individual GTIN settings
Features

Automatic production data upload
- Automatic and manual production data upload to superordinated systems
- Configurable trigger for upload
- Decommission data (with reason for rejection)
- Configurable XML formats
- Configurable error handling and retries in case of communication errors
- Possibility of configuring different XML formats and uploading a trigger for the batch end or the completion of the highest aggregation level

Adaptable / configurable interfaces to customer systems
- Serial number request (Client)
- Production data upload (Client)
- Material master interface (Client / Server)
- Production order interface (Client / Server)

Production order management
- Possibility of requesting production orders manually from a superordinated system and configurable edit mask
- List of all received production orders with their current statuses

Material management
- Possibility of requesting materials manually from a superordinated system and configurable edit mask
- List of all received materials with their version and current statuses
- Configurable edit mask

Batch overview
- List of all batches of all connected production lines
- Accessibility of all batch detail

Reporting
- Standard reports for:
  - Batch overview, Batch detail, Alarm history, Audit trail, Recipes
- Enhanceable external report list through additional report files

Notification events
- E-Mail forwarding to a definable group of people in case of different interface errors

Dashboard
- Statistics and graphical overview of Batch status, produced Materials and alarm statistics

Production lines overview
- Each line disposes of an automatic cyclical update
- Display of:
  - Machine state
  - Counters for each production level
  - Batch data
  - Batch uptime
- Access to the machine logbook
Minimum hardware requirements for application and database server (real or virtual)

- Processors: Intel® Xeon® Processor (1.86 GHz, 18 MB cache, 95 W)
- Memory: 32 GB (DDR3 and low-voltage DIMMs)
- Network Ctrlr: Two Dual Port 1 GbE Multifunction NIC
- Storage Ctrlr: – Storage controller supporting RAID with Cache of 512 MB (FBWC or BBWC)
  – Support RAID 0/1/1+0/5/5+0
- Hard Drive: – 2 x 72 GB 6G SAS 15K DP RAID 1 setting (for Operating System)
  – 4 x 300GB 3G SAS 10K DP RAID 5 setting (for Data)
- Operating Sys.: Microsoft Windows Server 2012 R2
- Database: Microsoft SQL Server 2014

Minimum hardware requirements for application only server (real or virtual)

- Processors: Intel® Xeon® Processor (1.86 GHz, 18 MB cache, 95 W)
- Memory: 4/8 GB (DDR3 and low-voltage DIMMs)
- Network Ctrlr: Two Dual Port 1 GbE Multifunction NIC
- Storage Ctrlr: – Storage controller supporting RAID with Cache of 512 MB (FBWC or BBWC)
  – Support RAID 0/1/1+0/5/5+0
- Hard Drive: 2 x 72 GB 6G SAS 15K DP RAID 1 setting (for Operating System)
- Operating Sys.: Microsoft Windows Server 2012 R2

### REQUIRED HARD DISK SPACE

<table>
<thead>
<tr>
<th>Usage</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Operating System files. Used by OS and SQL Server binaries</td>
<td>50 GB</td>
</tr>
<tr>
<td>SQL Server System Databases</td>
<td>SQL Server System database files</td>
<td>10 GB</td>
</tr>
<tr>
<td>SQL Server Multi Line Manager Databases</td>
<td>SQL Server Multi Line Manager database files</td>
<td>60 GB</td>
</tr>
<tr>
<td>SQL Server Transaction log</td>
<td>SQL Server Transaction log files</td>
<td>15 GB</td>
</tr>
<tr>
<td>SQL Server Temp Database</td>
<td>SQL Server Temp database files</td>
<td>15 GB</td>
</tr>
<tr>
<td>SQL Server Database Backup</td>
<td>SQL Server Backup dump</td>
<td>100 GB</td>
</tr>
<tr>
<td></td>
<td>For seven days retention time for the User database files</td>
<td></td>
</tr>
</tbody>
</table>

**Example for the needed Hard Drive space** (If each Item Record has approx. 1,05KB)

- Database with 100 Batches
- Each Batch includes 100,000 Items

These are approx. 105,000 Data records. Size of the Batch Dataset in this example is 10GB.
TRAXEED LIFE CYCLE SERVICE

Traxeed Service Desk
The Service Desk is staffed by qualified experts. They can provide 24/7 service 360 days a year. The Service Desk combines maximum competence with short response and solution times.

Traxeed Academy
Our customized training and support programs impart theoretical and practical knowledge to enhance the productivity of your employees.

Traxeed Field Service
Our technicians have the expertise and understanding that comes from time, training, dedication to their craft and determination to provide superior service to every customer.

Traxeed Original Spare Parts
We stock an extensive inventory of original spare parts at our worldwide locations to ensure speedy delivery. Machine-specific spare parts packages are also offered to give you in-house stock for immediate installation.

Traxeed Retrofit/Upgrades
Retrofit: For more flexibility and functionality, take advantage of the modularity and expandability of your machines and profit from consistently modern equipment. Upgrades: Improve your installed equipment and software with upgrades.

Traxeed Process Optimization/OEE
Consulting and technical support to increase equipment performance, availability and reliability.