

MATRIX-TM Release Notes V4.5

This document summarizes the changes and new features comparing MATRIX-TM V4.2 and V4.5.

Changes from V4.2:

Module	Feature	Description
<u>General</u>	Registration	<p>For previous versions, the registration code was the same for all installations.</p> <p><u>Now</u>, the registration code is generated by CTMS Support per combination of the following parameters:</p> <ul style="list-style-type: none"> - Server Name - Database Name - Number of workstations that will concurrently need to use either MANAGE and / or TOUCH. <p>Replicated databases will require another registration code for every replicated party.</p>
	Consignment Stock	<p><u>In previous versions</u> the 'Consignment' check box on item and bin screens influenced only the 'Return' process (no return was available into consignment bin) and on the interface with GAL.</p> <p><u>Now</u> it also influences the purchase order process (both for manual and automatic orders) and the 'Receive' by order process:</p> <p>Purchase Order: Ordered items are now being explicitly set as consignment or not. If the order line is on item or cabinet levels, the order line will get a 'Consignment' mark like the item. If the order line is on bin level, the order line will get 'Consignment' mark like the bin. This mark on the order line can be manually changed.</p> <p>For Gal interface, the Consignment mark will be transferred from the order line.</p> <p>'Receive' process: If the order line is consignment, it will allow receiving this item only to consignment bins. If the order line is non-consignment, it will allow receiving this item only to non-consignment bins.</p>
	Cost Centers and Item limitations	<p><u>In previous versions</u>, limiting which items could be issued for a cost center required limiting all the cost centers of that header by marking the 'Item Limitation' field on the cost center header.</p> <p><u>Now</u> this limitation is defined for each cost center individually by 'Item Limitation' field on the cost center detail.</p> <p>In 'Issue' process: When user selects limited cost center, only the allowed items will be displayed. When a non-limited cost center is selected, the full list of items will be displayed. See also in new features of Manage.</p>
<u>MANAGE</u>	Automatic orders for Durable items	<p><u>In previous versions</u>, even if an issued item was expected to be returned to stock, the automatic order process did not include it as a part of stock and created an order based on the 'In Stock' quantity.</p> <p><u>Now</u>, it is possible to consider issued items of 'Durable' type as a part of stock and to make the system create automatic</p>

		orders based on 'In Stock' quantity + 'Issued Quantity'. See new system option 815.
	Application, Main-Family & Sub-Family lists	<p>In previous versions, a user could not edit the lists of Main Family and Sub-Family, but only change its translation in 'Texts'. Also the list of Applications was hidden and could only be seen when searching an item on Touch module.</p> <p>Now, these lists (Application, Main Family & Sub-Family) are part of the System tables. The lists are dynamic now and do not support multiple languages.</p> <p>See:</p> <ul style="list-style-type: none"> - Menu: System Tables → Application → Application - Menu: System Tables → Application → Main Family - Menu: System Tables → Application → Sub Family
	Cabinet	<p>Matrix Cabinets of series 4 are renamed 'Matrix Ver2.0' → 'Matrix Series 4' on the 'Cabinet Maintenance' screen.</p>
		<p>The field 'Show CTRL Error' now has 2 options: <Never> and <Always>.</p> <p>It is expected that cabinets of type Matrix will always be defined to display errors.</p> <p>See also Rollbacks and Timeouts for Touch.</p>
	Bin	<p>The field 'Automatic Order' on the "Bin Maintenance" screen was removed.</p> <p>For creating an automatic order on the bin level, mark the 'Bin Stock Management' field.</p>
<u>TOUCH</u>	Change Issue	Option 'Transactions' on the main menu was renamed to 'Change Issue'.
	Rollbacks and Timeouts	<p>Timeouts:</p> <p>If the drawer is closed, the Login timeout will be activated for all screens (system option 1007) starting from the moment that user stopped using Touch.</p> <p>If the drawer is open, the Operation timeout will be activated (system option 1013) in the Issue and Return processes, starting from the moment that the drawer was opened. In all the other modes there will be no timeout.</p> <p>Rollbacks:</p> <p>If for some reason the required bin did not open and the machine reported an error, Touch will make a rollback and the transaction will NOT be recorded.</p> <p>In modes 'Adjust Item' and 'Count Bins' there always will be recorded transaction assuming that user will not make quantity change if the bin did not open.</p> <p>The above processes have been upgraded in V4.5 including a modification to the controller firmware, to provide more stable and reliable performance.</p>
<u>Interfaces</u>	Reports	<p>The report for SAP transactions was renamed and moved:</p> <p>From: Administration --> Interfaces --> Interface Report</p> <p>To: Reports --> Interface --> SAP Interface Report</p>

New features:

General:

Feature	Description
General	<p>Vista 32-64 Bit Matrix-TM is now supported on Windows Vista 32 Bit / 64 Bit. Touch however is limited to non automatic cabinet on Vista 64Bit. When UAC (User Account Control – set of Windows security parameters, for example: writing into 'Program Files' folder) is enabled, the Settings program must run with administration privileges explicitly to save its settings.</p> <p>SQL Agent, SQL 2005-2008, SQL Express Editions Matrix-TM can now run on SQL Server 2005 and 2008. Since these platforms do not have SQL Server Agent, a new feature Matrix-TM Agent was added to the Database Administration tool for replacement (see also New features in Database Administration). The Matrix-TM setup program requires the “Ole Automation” and “xp_cmdshell” (inter-process communication and store procedure used by Database Update process) to be enabled (disabled by default).</p> <p>Windows Authentication Matrix-TM can now connect the database also using Windows Authentication. It is set in the Matrix-TM Settings program.</p> <p>Named SQL Server instances Matrix-TM can be now installed on a named SQL Server instance.</p>
Setup	<p><u>Add shortcut to startup:</u> In the installation process, when selecting modules to install, a new option <Add Touch as Startup program> was added.</p> <p><u>Windows Authentication:</u> In the installation process, when setting database data, a new option <Windows Authentication> was added.</p> <p><u>New files in the installed folder:</u> - MS-Excel template file for Import Data, located in: C:\Program Files\MATRIX-TM\Application\ImportFiles\ImportData_MX45.xls - Firmware application for updating the control system for Matrix Cabinets of series 4: C:\Program Files\MATRIX-TM 4.5\Application\MatrixFirmware\Installer.msi</p>
Settings	<p>New options were added to the Settings screen:</p> <ul style="list-style-type: none"> • Windows Authentication • TOUCH – Machine Log • TOUCH – Line Monitor
New Languages	<p>Matrix-TM now supports 4 more languages: eu – Basque nb – Norwegian ro – Romanian tr – Turkish In total 25 languages are supported.</p>

<p>Serial Items</p>	<p>You can now mark a Durable item as serial in order to manage each piece individually by its unique serial number. For example, when an operator issues a serial item, the serial number of the piece issued will be recorded.</p> <p><u>In Manage:</u></p> <ul style="list-style-type: none"> - New 'Serial' field on the 'Item Maintenance' screen - New 'Serial' tab on the 'Item Maintenance' screen - New column 'Serial Number' on the 'Item Maintenance' screen on 'Transactions' tab - New 'Serial' tab on the 'Bin Maintenance' screen - New column 'Serial Number' on the 'Bin Maintenance' screen on 'Transactions' tab - New search screen for managing serial numbers: "Main → Serial Items" <p><u>In Touch:</u></p> <p>Serial numbers are supported in the following modes: Issue, Receive, Return, Change Issue, Receive without Order.</p>
<p>Item Type -Gauge</p>	<p>New item type 'Gauge' was added. This item type is considered as a serial item with the ability to manage its calibration information.</p> <p><u>In Manage:</u></p> <ul style="list-style-type: none"> - New 'Gauge' tab on the 'Item Maintenance' screen of gauge item - New screen "Operations → Send Gauge to Calibration" - New report "Reports → Gauge → Calibration History" - Tab 'Calibration History' on the 'Serial Item Maintenance' screen of gauge item
<p>Site Mapping</p>	<p>New tool called 'Site Mapping' that graphically displays in one screen all the connections between sites, cabinets, drawers, bins and stored items. In Manage this map will enable the user to easily access maintenance screens. In Touch this feature is a part of 'Local Information' feature and allows physically to open any drawer and / or any bin, usually for maintenance reasons.</p> <p>In Manage, see "Menu: Main → Site Mapping". In Touch, when having access to keyboard and mouse, right-click on the Main Menu, select 'Local Information' on the popup-menu and select 'Site mapping' tab.</p>
<p>IN/OUT Requests</p>	<p>This new mode supports electronic data interface between MATRIX-TM and external devices, such as Zoller. Zoller can transmit a list of tools for issue or return to MATRIX with specific reference fields, based on tools that are needed for pre-setting. Further, technology teams can prepare tool lists manually with Manage, which are then accessible via this mode on Touch.</p> <p><u>In Manage see:</u></p> <ul style="list-style-type: none"> - Menu: Administration → Interfaces → In/Out Requests - Menu: Reports → Interface → In/Out Requests Report <p><u>In Touch see:</u></p> <ul style="list-style-type: none"> - 'IN/OUT Requests' mode.
<p>Item information pop-up screen</p>	<p>A pop-up Item Information screen displayed by clicking on the item image on the TOUCH screen during the last step in a transaction:</p> <ul style="list-style-type: none"> - New tabs were added to this screen - All the tabs are now subject to access authorizations that can be defined per User Group. For each tab displayed you can set the authorization whether to show (Enabled) or to hide (Disabled/Hidden). <p>See more details in new features for Touch.</p>

Interfaces:

Feature	Description
Interface between MATRIX and SAP	The MSI has been upgraded and is compatible with 3 SAP versions, 4.6C, 5 and 6. A fuller explanation of the MSI can be downloaded from the CTMS Members Site.
Interface between MATRIX and THINC	This new interface provides electronic data interface between MATRIX-TM, Okuma's Thinc controller and Zoller. For more information about this interface, contact MATRIX support and download our PPT from the CTMS Members Site For this: <ul style="list-style-type: none"> - New interface type 'THINC' was added to 'Interface' field on "Interface Maintenance" screen. See "Menu: Administration → Interfaces → Interfaces". - New screen was added to manage input and output requests. See "Menu: Administration → Interfaces → In/Out Requests". See also new <In/Out Requests> module in New features in General. - New report was added for following the THINC requests. See "Menu: Reports → Interface → In/Out Requests Report".
General	Interface Scheduler: For the field 'Schedule Day' a new option ' Every Hour ' was added.
Receive and Receive without Order	If the customer uses reference fields (as set by system option 111 - Number of reference fields to use on Receive), it is now possible to set these fields as required. See system option 114.

Database Administration:

Feature	Description
History Data Options	New option 'History Log' was added to delete content of 'History Log' that is in the Manage. See also new system option 214.
Matrix-TM Agent	Matrix-TM Agent can now replace the SQL Server Agent, which is not included with SQL Server 2005 and 2008 Express editions.
Local Information	New information about ' Server Name ' is printed to the window.

MANAGE Module:

Feature	Description
New options in the Main Menu	<p>New options in Main Menu (for the description see relevant chapter):</p> <ul style="list-style-type: none"> - Main → Serial Items - Main → Site Mapping - Operations → Send Gauge to Calibration - Reports → Orders Reports → Orders Simulator - Reports → Interface → In/Out Requests Report - Reports → Gauge → Calibration History - Reports → Saved Advanced Reports - Reports → Cost Center Links - System Tables → Scrap Reasons - System Tables → Application → Application - System Tables → Application → Main Family - System Tables → Application → Sub Family - Tools → Savings Account → Search Savings Account - Tools → Savings Account → Search Projects - Tools → Import → Import Scheduler - Administration → Interfaces → In/Out Requests - Administration → History Log
General	<p>New Scrap items option, supported only in Manage module. When a user adjusts an item in bin and reduces the existing stock quantity, there is an option to Scrap the delta by allocating one of the pre-defined scrap reasons. This will record a 'Scrap' transaction instead of 'Adjust Bin Quantity' transaction. See "Menu: System Tables → Scrap Reasons" to edit scrap reasons.</p> <p>New option Analyzer in Manage. This is an analytical and management tool that displays key performance metrics all on one screen. The simplified format provides easy access for decision makers, thus improving awareness and control. It is also a flexible tool with different viewing options, quick reports and filters. See <Analyzer> icon on the menu tool bar.</p> <p>New option Saving Accounts in Manage, that measures tool and machining cost savings from productivity projects, and tracks project savings against target savings. The purpose of Savings Account is to focus attention on productivity & continuous improvement. Aggregate results of all Savings Accounts for the current calendar year appear in Analyzer. See in Manage:</p> <ul style="list-style-type: none"> - Menu: Tools → Savings Account → Search Savings Account - Menu: Tools → Savings Account → Search Projects
Search screens	<p>When opening any search screen and selecting a record, the string on top that displays how many records were found now also displays the sequence of the selected record. For example: "Found 1200 records. Row: 25"</p> <p>When there are more than 4 lines of search fields, arrows will be displayed under the last line just above the grid. To show these other lines, click on the arrows.</p>
Users and User Groups	<p>The 'User Group Maintenance' screen has a new button to copy the current user group together with its authorizations.</p> <p>The 'User Group Maintenance' screen has a new field 'Remarks'.</p> <p>The 'User Maintenance' screen has a new field 'Remarks'.</p>

<p>System options</p>	<p><u>Option 113 - Return Only Issued Items</u> In 'Return' mode only those Items that were issued will appear as returnable.</p> <p>If this system option is set to YES, the Return mode in Touch will display only the Durable items that have 'Issued Quantity' more than zero.</p> <hr/> <p><u>Option 114 - Require Reference fields</u> Require for reference fields can be used in the 'Receive' process for interfaces with ERP systems.</p> <p>If the customer uses reference fields (as set by system option 111 - Number of reference fields to use on Receive), it is now possible to set these fields as required.</p> <hr/> <p><u>Option 214 - Manage History Log file</u> Records changes into History Log file, such as changes of item data, bin data etc...</p> <hr/> <p><u>Option 215 - Ratio between stock and usage</u> Ratio between stock and usage (as presented in Analyzer)</p> <hr/> <p><u>Option 405 - Path for Logs</u> Path for creating system Log files. %TEMP%\Matrix-TM\Logs</p> <hr/> <p><u>Option 813 - Path for template file for Order reports</u> Path for template file that is used for Order reports. ..\ReportTemplates\StandartReport.rpx</p> <p>New order reports customized to the customer's needs can be created using the software User Report Designer.exe which is in the installation files.</p> <hr/> <p><u>Option 814 - Request date on create order line</u> On create order line 'Request Date' is equal to 'Order date'. If value=NO, then 'Request Date' is empty.</p> <hr/> <p><u>Option 815 - Count Issued Durable items</u> If checked, Durable items that were issued will be counted as a part of stock for Automatic Orders.</p> <hr/> <p><u>Option 1015 - Source of description for item image</u> Source of description for item image. Item Code, Additional Item Code, Item Description, Long Description</p> <p>In system option 1008 (User for Automatic login) no need to type user name, rather make a selection from list.</p> <hr/> <p>In system options that contain a path to folders and files, a new <Browse> button was added in order to allow setting the path by select. For example system options 400, 401 etc...</p>
<p>Item Maintenance</p>	<p>New field 'Special' was added to the 'Item Maintenance' screen on the 'General' tab to differentiate special items from standard items. This field has no dependencies.</p>
<p>Cost Centers</p>	<p>The field 'Item Limitation' was changed to 'Default Item Limitation' on the 'Cost Center Header Maintenance' screen. This field no longer limits items for issue, but is used as a recommendation for the 'Item Limitation' mark of specific</p>

	<p>cost centers. The advantage is that the limitation can be applied selectively to specific cost center details. See also changes from V4.2 on Cost Centers and Items limitations.</p>
	<p>New field 'Item Limitation' was added to the 'Cost Center Details Maintenance' screen in order to limit items for issue in TOUCH. See also changes from V4.2 on Cost Centers and Items limitations.</p>
Orders	<p>New field 'Consignment' was added for order lines of Standard Purchase orders and Internal orders. In automatic and manual orders... if the order line is on item or cabinet levels, the order line will get a 'Consignment' mark like the item. If the order line is on bin level, the order line will get a 'Consignment' mark like the bin. This mark on the order line can be manually changed. See also changes from V4.2 on Consignment Stock feature.</p>
	<p>The order Printout has now new look that is based on a template file defined in new system option 813. An advanced user can edit this template file with an external program or; create a new template and update the system option.</p>
Receive	<p>If the order line is consignment, it will allow receiving this item only to consignment bins. If the order line is non-consignment, it will allow receiving this item only to non-consignment bins. New column for Consignment data was added to the screen of 'Receive Order', to 'Basic Orders Report' and to 'Advanced Orders Report'. See also changes from V4.2 on Consignment Stock feature.</p>
Reports	<p>Now all the saved advanced reports are listed in one search screen and a user can open the report from this screen. Also deleting reports is possible in this option only. See "Menu: Reports → Saved Advanced Reports". By right mouse click you can select "Open Maintenance" to open the report.</p>
	<p>New report that displays recorded operations in the system, if system option 214 is set to YES. See "Menu: Administration → History Log". By right mouse click you can select "Open Maintenance" to open the entity that changed.</p>
	<p>The report 'Issue / Return Comparison' displays additional information: 'Difference' which represents the difference between the issued quantities and returned quantities. Also it is possible now to filter records by date. See "Menu: Reports → Transactions → Issue / Return Comparison".</p>
	<p>New report 'Orders Simulator' calculates the estimated days to delivery of ordered items, their current stock level in stock days, and allows the user to filter those order lines where the difference is considered to be unacceptably small, for example 7 days or less. This simulation allows purchasing to focus on order lines that are urgently required in order to avoid a stock out. See "Menu: Reports → Orders Reports → Orders Simulator".</p>
	<p>New report 'Cost Center Links' was added to display the links between parent and child cost centers. This report also allows selection of multiple records for delete by using CTRL and SHIFT keys and opening maintenance screens from pop-up menu by right mouse click. See "Menu: Reports → Cost Center Links".</p>
	<p>Advanced reports - fields which have Date parameters – we have a new</p>

	<p>option 'Current Day', 'Current Week', 'Current Month', 'Current Year' for filtering the records. For example: in 'Advanced Orders Report' for 'Order Date' field, in 'Advanced Transactions Report' for 'Transaction Date' field etc.</p> <p><u>Scheduling Report:</u> New field 'Email Address' was added to display the email address of the selected User Name. Another field 'CC E-mail' was added, with an option to select user from list, who is going to receive the report additionally to the main user.</p> <p><u>Scheduling Report:</u> For the field 'Schedule Day' a new option 'Every Hour' was added.</p> <p><u>Scheduling Report:</u> A new button <Run> was added in order to create the report immediately.</p> <p>Report 'Items-Cost Centers' allows selection of multiple records for delete by using CTRL and SHIFT keys. New options were added to pop-up menu by right mouse click.</p>
Import Data	<p>It is now possible to import values for additional fields of Items and Bins. The additional fields must be previously created and its values can be imported by the following tables: <u>V_IMPORT_ITEM_ADDITIONAL_FIELDS</u> <u>V_IMPORT_BIN_ADDITIONAL_FIELDS</u></p> <p>It is now possible to import links between Cost Center and Items that will be available when selecting this cost center in the Issue process. See table <u>ENT_ITEM_COST_CENTER</u> and also changes from V4.2 on Cost Centers and Items limitations.</p> <p>It is now possible to import translated texts to the <u>TBL_TEXTS</u> table.</p> <p>Since the lists of Application, Main-Family & Sub-Family are dynamic and available for editing (see changes from V4.2), it is now also possible to import records into these lists by the following tables: <u>ENT_CATALOG_APPLICATION</u> <u>ENT_CATALOG_MAIN_FAMILY</u> <u>ENT_CATALOG_SUB_FAMILY</u></p> <p>More tables are available for import: <u>ENT_ITEM_KIT</u> – For assembling items into a kit <u>ENT_REQUESTS</u> – For importing In/Out Requests into new module in Touch and into "Administration → Interfaces → In/Out Requests" screen. <u>V_IMPORT_ITEM_LINKS</u> – For importing links into 'Links' tab that is on the Item Maintenance and Item Information screen in TOUCH where an item image appears prior to completing a transaction.</p>
Authorizations	<p>Since TOUCH module has a new 'IN/OUT Requests' option on the Main Menu (see also in New features in General), the Authorization Manager has a new option to set access authorizations to this option. See 'Controls Authorization' tab → TOUCH SYSTEM tree → Main Menu option → In/Out Request in the controls list.</p> <p>Since TOUCH module has a new 'Change Login Password' option on the Main Menu (see also in New features in TOUCH Module), the Authorization Manager has a new option to set access authorizations to this option. See 'Controls Authorization' tab → TOUCH SYSTEM tree → Change Password</p>

	option.
Additional Fields	When some of the entities ITEM / BIN / PO / PO LINE have additional fields of type txt and user inserts a value for record, this value is saved into list and can be used for another record of the same entity. For example: insert string for additional field of some item on the 'Additional Items' tab of Item Maintenance, save and then open another item for adding value.

TOUCH Module:

Feature	Description
General	On the Main Menu there is a new option to Change Login Password by entering existing password and confirming new password.
	<u>Search by image:</u> Window that displays images of groups and items has the following additions: <ul style="list-style-type: none"> - Window for selecting group displays the groups by alphabetic order. - Window for selecting item displays item data according to system option 1015 (Source of description for item image). An operator, during the item selection process, can select what data to display (Item Code, Additional Item Code, Item Description, Long Description).
Receive	<u>Consignment:</u> If the order line is consignment, the item can be received into consignment bins. If the order line is non-consignment, the item can only be received into non-consignment bins. New 'Consignment' column was added to order lines search screen. See also changes from V4.2 on Consignment Stock feature.
Return	<u>Return issued items:</u> It is now possible to display only those items that were issued, meaning only Durable items that have 'Issued Quantity' more than zero. See also system option 113.
Item Information pop-up screen	The Item Information pop-up screen now has access authorizations. For each tab displayed you can set authorization to show (Enabled) or to hide (Disabled/Hidden). See also in New features in General.
	On the Item Information screen some tabs were changed and also new tabs were added: Item Picture – displays the item image enlarged Links – lists the links to files that were defined for the item on the 'Links' tab in Manage and displays the file content on the window below. Kit Items – lists the items in the kit, if the current item is of Kit type. Cost Centers – lists all the cost centers for which this item should be available in Issue. Transaction – lists up to 200 last Issue transactions. Serial – lists the serial numbers of the item, if the item if of Gauge type or was marked as serial. Calibration – displays calibration history Price – displays information regarding the different prices of the item, such as Item price, Supplier price etc... Orders – lists open order lines of the item.
IN/OUT Requests	This new module was added in order to support interface with THINC / Zoller.

	<p>When receiving requests from THINC / Zoller, this module will display the requests and enable user to issue or receive tools according to such requests.</p>
<p>Local Information</p>	<p>New tool that displays many details regarding the Touch station and can be used to manually open bins. Requires use of MATRIX pc keyboard and mouse. Right-click on the Main Menu screen, and select 'Local Information' on the popup-menu. The following tabs will be displayed:</p> <ul style="list-style-type: none"> Cabinet – Lists the cabinet/s associated with the Touch station Site Mapping - Graphically displays in one screen all the connections between sites, cabinets, drawers, bins and stored items. It allows the user to manually open any drawer and / or any bin, usually for maintenance reasons. Error – Lists any cabinet errors, such as "Cabinet Log" in Manage Local Information – displays information regarding the PC running Touch, Server etc. as DBAdmin.