Thru-Put 7.0 - Changes to Database

Thru-Put Advanced Planning and Scheduling

Publication Information

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Style Conventions

The following is the list of conventions used throughout this document:

[ ]	Square brackets are used around text to indicate optional items, except in languages in which brackets are part of the syntax. You should type only the information within the brackets, not the brackets.
Italics	Italics are used to specify a variable name or other information the user must provide – for example, a path and file name. We also use them to denote parameters, placeholders, new terms, emphasis, and book titles.
Bold	Bolded text is used to indicate commands; text that must be entered exactly as it appears in this document; and buttons, checkboxes, menu commands, tabs, and option buttons that must be clicked.

Intended Readers

- Technology Managers
- Systems Engineers
- Web/Network Administrators

Overview

While using Thru-Put 7.0(64 Bit) Advanced Planning and Scheduling software, we recommend user to use Microsoft SQL Server 2005 or above version of database. Both 32 Bit and 64 Bit versions are supported. Microsoft Access 64 Bit drivers are not available and hence Thru-Put 7.0 is not available to work with Microsoft Access. This document summarizes new tables added to the database and new columns added to existing tables. Since, PART and SALES tables are affected, customers need to change the FMT files in case you have set up User Defined Attributes in PART and SALES download. In PART download, index of UDA fields need to be increased by one. In SALES download, index of UDA fields need to be increased by. Starting index of the first UDA field can be identified by opening DBUtil application and then go to File->Prepare Format Files. Choose Part (or Sales) and from the dialog, note down value of "First User Field ID Index".

New Tables added to Software

Thru-Put 7.0 now has three additional tables newly added:

1. CALPOLY_SHIFT – For specifying the Shift start times policy over the week
2. CAL_SHIFT – Specifying the shift start time information in a given date range by overriding general shift information policy
3. PLAN_PROFILE – For specifying the vendor item receiving calendar when daily call offs of purchase orders need to be specified

CALPOLY_SHIFT

CALPOLY_SHIFT contains the information regarding weekly shift start times for up to three shifts. You can specify the start time and duration and number of units working in each shifts. This table forms the default information for the shifts, unless overridden in CAL_SHIFT table. If you want to define a particular day of the week as a holiday, you can specify zero units in the Units column. You can leave the values blank, if you don't have a given shift. Sales, forecast, safety stock, Work order, Purchase orders due times follow the DEFAULT calendar. Except for Purchase orders in the above list, all other due times in

the above list are end of the last shift for the day unless overridden in the configuration. For purchase order, the due time is start time of the first shift unless overridden in the configuration.

Name	Type	Description
LOCATION_ID	**TEXT(15)**	Location ID or the Warehouse number
CALENDAR_ID	**TEXT(15)**	Name of the Calendar for which Calendar shift start times needs to be defined. If a given calendar is not specified in the table, then the shift start time is considered as the 00:00:00 i.e. mid night
WEEK_DAY	**NUMBER (INTEGER)**	Day of the week starting from Sunday thru Saturday (1,2,.., 7)
SHIFT1_START	**NUMBER (INTEGER)**	Start time in minutes. For example, 7:00AM in the morning would be 420. 3:00PM would be 900.
SHIFT1_LENGTH	**NUMBER (INTEGER)**	Working time or shift length in minutes
SHIFT1_UNITS	**NUMBER (INTEGER)**	Number of units working for a given shift. Currently, the number of units is used in scheduling. This matters only when you specify 0 units in which case, it is considered to be nonworking. **Please use the value in Units column in the WKCTR table.**
SHIFT2_START	**NUMBER (INTEGER)**	Start time in minutes. For example, 7:00AM in the morning would be 420. 3:00PM would be 900.
SHIFT2_LENGTH	**NUMBER (INTEGER)**	Working time or shift length in minutes
SHIFT2_UNITS	**NUMBER (INTEGER)**	Number of units working for a given shift. Currently, the number of units is used in scheduling. This matters only when you specify 0 units in which case, it is considered to be nonworking. **Please use the value in Units2 column in the WKCTR table.**
SHIFT3_START	**NUMBER (INTEGER)**	Start time in minutes. For example, 7:00AM in the morning would be 420. 3:00PM would be 900.
SHIFT3_LENGTH	**NUMBER (INTEGER)**	Working time or shift length in minutes
SHIFT3_UNITS	**NUMBER (INTEGER)**	Number of units working for a given shift. Currently, the number of units is used in scheduling. This matters only when you specify 0 units in which case, it is considered to be nonworking. **Please use the value in Units3 column in the WKCTR table.**

CAL_SHIFT

Name	Type	Description
LOCATION_ID	**TEXT(15)**	Time in seconds representing the clock time of the day when the delivery is requested. If zero is specified, then the delivery time requested is considerd at the end of the work day.
CALENDAR_ID	**TEXT(15)**	Date of the start of the order when the first quantity of the order is needed. If the date happens to be a nonworking day, then previous work day is taken.
START_DATE	**DATE**	Start date when the exception to the Shift Policy should apply.
END_DATE	**DATE**	End date when the exception to the Shift policy should end. (End Date included)
SHIFT1_START	**NUMBER (INTEGER)**	Start time in minutes. For example, 7:00AM in the morning would be 420. 3:00PM would be 900.
SHIFT1_LENGTH	**NUMBER (INTEGER)**	Working time or shift length in minutes
SHIFT1_UNITS	**NUMBER (INTEGER)**	Number of units working for a given shift. Currently, the number of units is used in scheduling. This matters only when you specify 0 units in which case, it is considered to be nonworking.
SHIFT2_START	**NUMBER (INTEGER)**	Start time in minutes. For example, 7:00AM in the morning would be 420. 3:00PM would be 900.
SHIFT2_LENGTH	**NUMBER (INTEGER)**	Working time or shift length in minutes
SHIFT2_UNITS	**NUMBER (INTEGER)**	Number of units working for a given shift. Currently, the number of units is used in scheduling. This matters only when you specify 0 units in which case, it is considered to be nonworking.
SHIFT3_START	**NUMBER (INTEGER)**	Start time in minutes. For example, 7:00AM in the morning would be 420. 3:00PM would be 900.
SHIFT3_LENGTH	**NUMBER (INTEGER)**	Working time or shift length in minutes
SHIFT3_UNITS	**NUMBER (INTEGER)**	Number of units working for a given shift. Currently, the number of units is used in scheduling. This matters only when you specify 0 units in which case, it is considered to be nonworking.

PLAN_PROFILE

Name	Type	Description
PROFILE_NAME	**TEXT(15)**	Time in seconds representing the clock time of the day when the delivery is requested. If zero is specified, then the delivery time requested is considered at the end of the work day.
LOCATION_ID	**TEXT(15)**	Location ID or ware house number.
PERIOD_ID	**NUMBER (INTEGER)**	Unique period ID, starting from 1 to indicate the date range..
PERIOD_RANGE	**DATE**	Number of days for which the given period is active. The first period starts from the plan horizon start. Subsequent period start from the next day from the previous period.
DELIVERY_FREQUENCY	**NUMBER (INTEGER)**	The frequency in days at which the buy item is delivered. Every other day would be 2. This is using calendar days (not working calendar).
RAMPUP_FACTOR	**NUMBER (INTEGER)**	If there is an additional quantity delivered during the initial days of the scheduled purchase order delivery. Default is zero.
RAMPUP_MODE	**NUMBER (INTEGER)**	Whether the Ramp up specified in absolute quantity or a percent value

All the requirements beyond the last Period range will be left wherever they are (no scheduled delivery and instead just a single PO for each requirement

Changes to Existing Tables

Currently, PART, WKCTR and SALES tables have new columns added. We may be adding more columns to one or more tables currently available in the database.

Changes to PART Table

To handle the daily vendor call offs a new column referencing the planning profile of the purchase item is added.

Name	Type	Description
PLAN_PROFILE_NAME	**TEXT (15)**	Schedule delivery Profile to be used when a daily call-offs are require for an item

Changes to WKCTR Table

To handle variable number of units, there two additional units' columns added to the WKCTR table. Thru-Put can handle only up to three shifts at the moment. When shift calendar is specified, Units column in the WKCTR table represents the assigned Units in the first shift.

Name	Type	Description
UNITS2	**INTEGER**	Number of Units assigned to second Shift. Note this field comes into play only if CALPOLY_SHIFT table has data for the work center calendar
UNITS3	**INTEGER**	Number of Units assigned to third Shift. Note this field comes into play only if CALPOLY_SHIFT table has data for the work center calendar

Changes to SALES Table

Name	Type	Description
REQUEST_TIME	**NUMBER (INTEGER)**	Time in seconds representing the clock time of the day when the delivery is requested. If zero is specified, then the delivery time requested is considered at the end of the work day.
DEMAND_STARTDATE	**DATE**	Date of the start of the order when the first quantity of the order is needed. If the date happens to be a nonworking day, then previous work day is taken.
DEMAND_STARTTIME	**NUMBER (INTEGER)**	Time in seconds representing the clock time of the day when the demand for the first item is placed.
DEMAND_ENDDATE	**DATE**	Date of the end of the order when the last piece of the order is needed. If the date happens to be a nonworking day, then previous work day is taken.
DEMAND_ENDTIME	**NUMBER (INTEGER)**	Time in seconds representing the clock time of the day when the last quantity of the demand is needed.
DEMAND_RATE	**NUMBER (INTEGER)**	Quantity needed per hour. Rate at which the item on order is produced.
DELIVERY_STARTDATE	**DATE**	Date of the start of the order when the first quantity of the order will start.
DELIVERY_STARTTIME	**NUMBER (INTEGER)**	Time in seconds representing the clock time of the day when the first piece of the delivery will start.
MATL_ORDERNO	**TEXT(15)**	Group number of the order when multiple orders to be processed together.