VISUAL PLANNER DATABASE REFERENCE GUIDE

This document explains the list of input and output table structures used by Visual Planner 8.0.

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Overview

Thru-Put/VPi database stores the master data downloaded from an ERP System such as XA, LX etc. Thru-Put/VPi also stores the schedule output tables that are used to put back the schedules to XA, drive Thru-Put/VPi scheduling and purchasing web Reports, Customer Service workbench etc. The database schema layout summarized below corresponds to Visual Planner as of version 8.0.32.

Note:

Following naming convention is followed while summarizing the tables.

<tableName>(I) Indicates Input table.

<tableName>(O) Indicates Output table.

In each of the tables, columns with prefix '*' indicate the primary Key. They need to be provided in order to successfully insert a record to the table. For the remaining fields, you can provide '' value for Text, and 0 for numbers and '' for Date values. For date values, it may be wise to copy the date from another field if they are equal.

Input Tables

Following is the summary of input tables:

- PART – Item master
- WKCTR – Facility Master or workcenter List
- ROUTE – Standard operation Routing definitions
- PART_PROCESS – Item specific and time effective routing allocation Information summary
- JSBOM – Bill of Materials with where used Information
- PURCHASE – Incoming purchase orders
- SALES – List of Customer Orders, ISL orders
- Forecast – Forecast orders and Safety stocks and Replenishments
- WOHEAD – Manufacturing order header or work order header master list

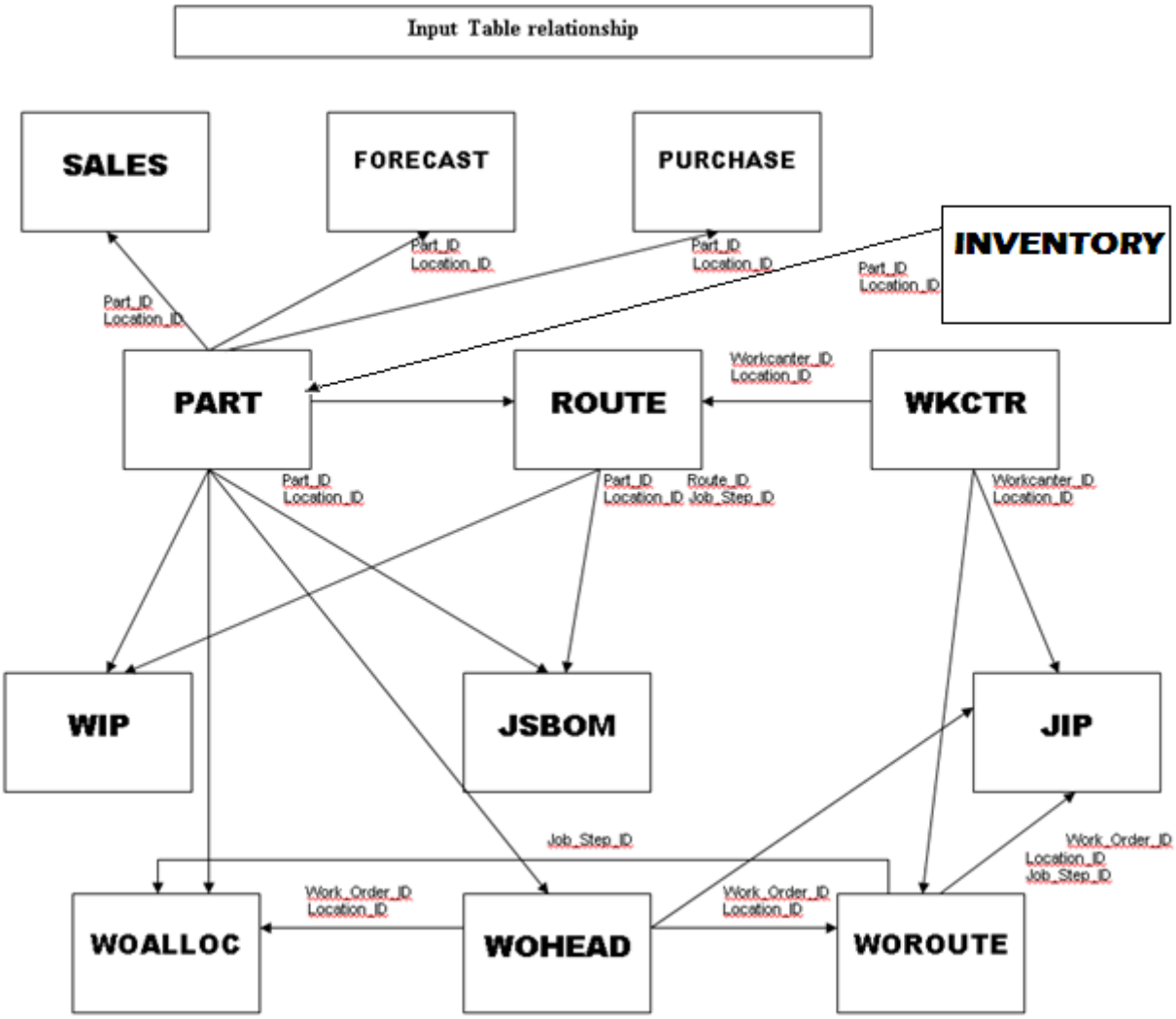
- WOROUTE – Operation details, resource requirements and completion status of individual job step details, and run time details
- WOALLOC - Component allocations and issues for an open manufacturing or assembly work order.
- JIP – Jobs in Progress. Progress details on the ongoing long running operation and outside processing operation details.
- INVENTORY – Contains QTY_ON_HAND value for the parts.

Output Tables

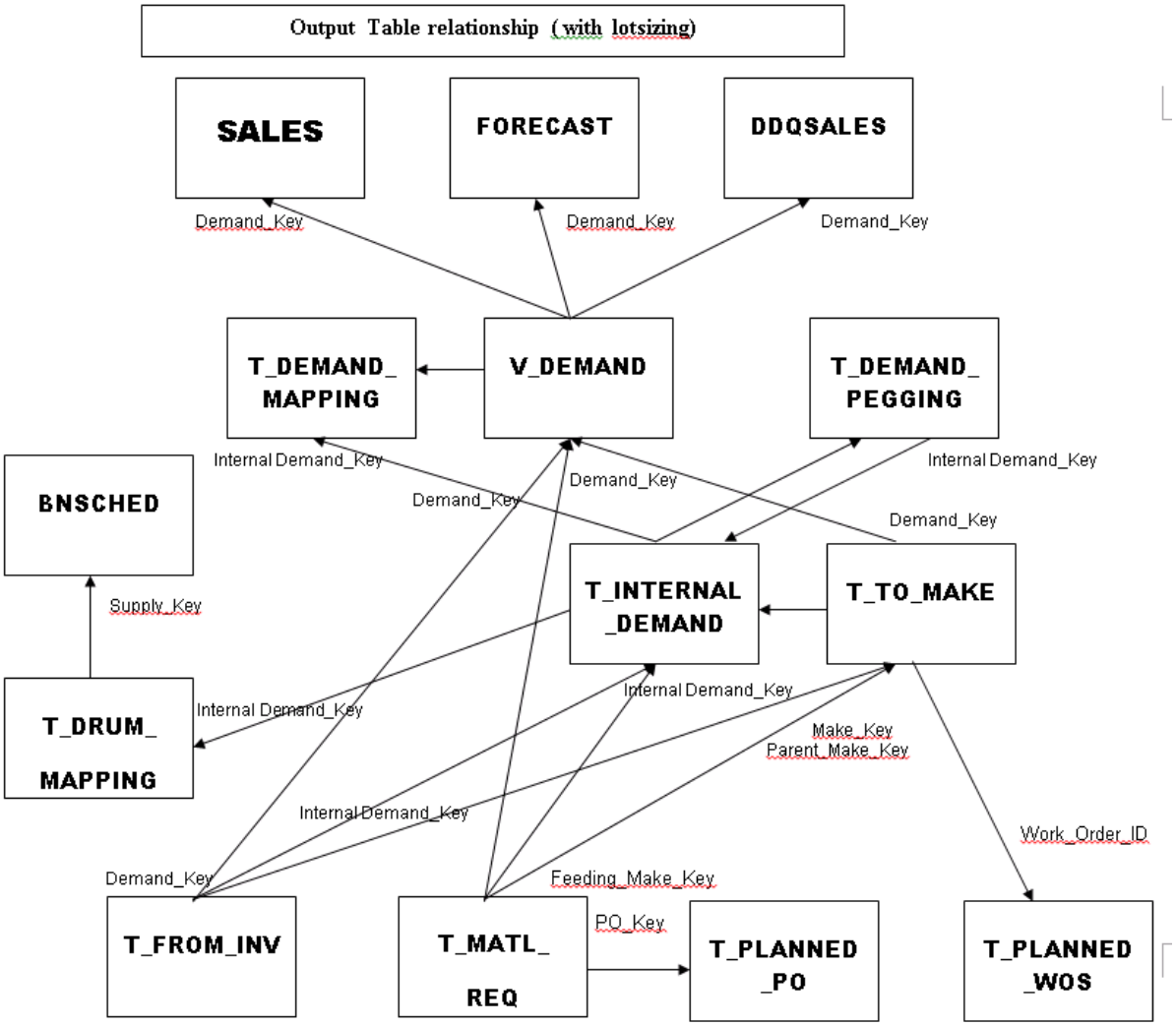
Following is the summary of output tables:

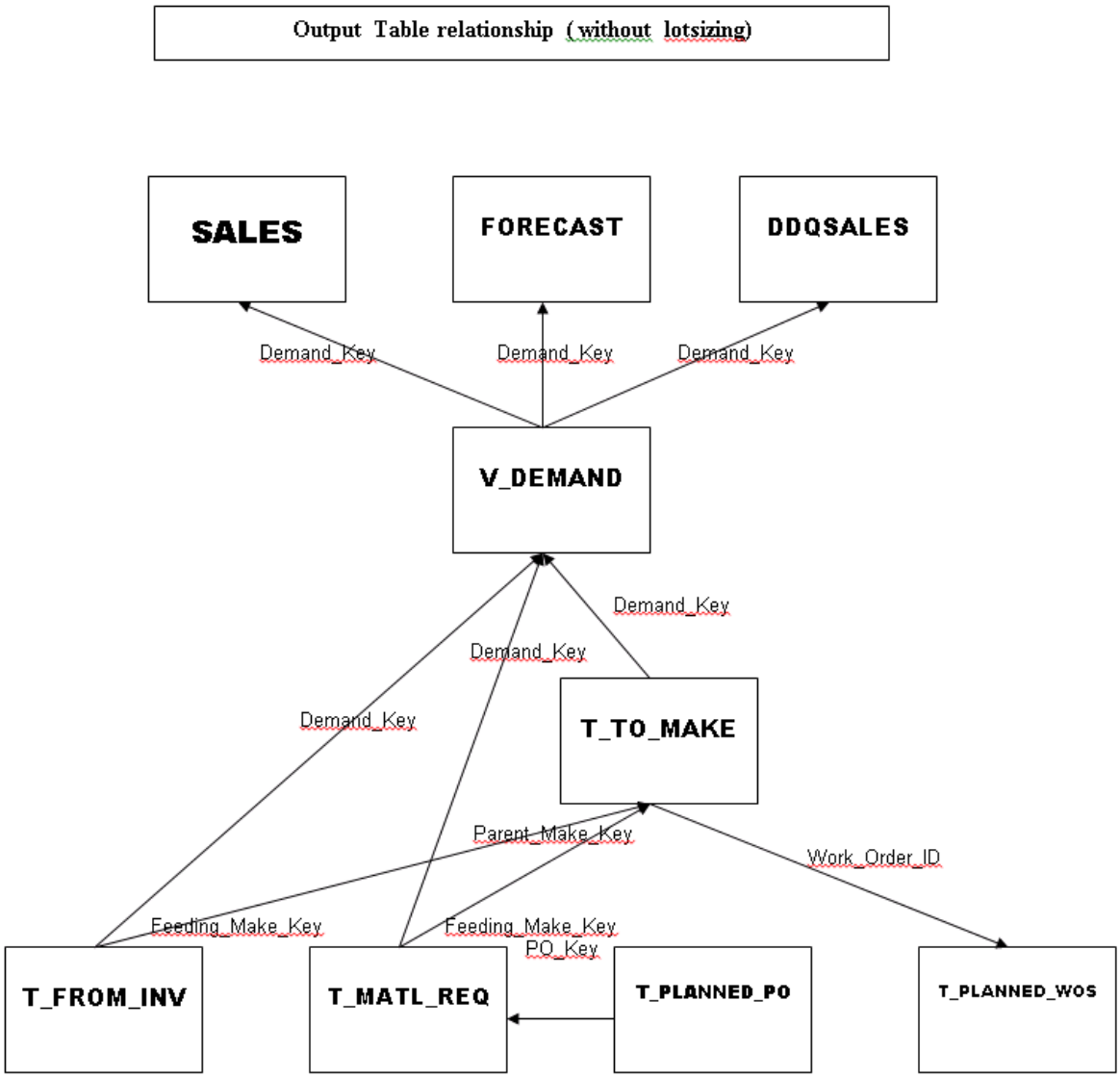
- T_INTERNAL_DEMAND – All work order start and end summary
- T_FROM_INV – All on hand assignments to the work orders and end order and forecasts
- T_TO_MAKE – All operation Starts on the work orders and suggested work orders.
- T_MATL_REQ – All purchase item supply consumptions and requisition requirements
- T_DEMAND_PEGGING – Component work order allocation mapping
- T_DEMAND_MAPPING – All work order allocation information wrt final customer order or forecasts and safety stocks
- T_PLANNED_PO – All Suggested Purchase order recommended by Thru-Put/VPi Scheduling
- T_PLANNED_WOS- All Suggested Work order recommended by Thru-Put/VPi Scheduling
- SUPPLY_DEMAND – Bucketized Item Supply Demand information.

Relationship between Input tables



Relationship between Output tables





Input Table Details

In the following section, a quick specification of all the fields contained in individual input tables is given:

FORECAST(I) TABLE:

All the forecast orders, safety stocks and replenishment or Kanban demands are included in this table.

Column Name	Field Type	Description	Default value
FORECAST_ID	**TEXT (15)**	**Forecast ID.**	
PART_ID	**TEXT (40)**	**Unique identifier for this part in the supply chain.**	
TARGET_DATE	**DATE/TIME**	**The date the forecast is due.**	
FORECAST_QTY	**NUMBER (DOUBLE)**	**Quantity of the forecast.**	
CONSUMED_QTY	**NUMBER (DOUBLE)**	**Quantity of the forecast which has been consumed. Input field. The forecast that has been consumed due to shipped orders.**	
EARLIEST_START	**DATE/TIME**	**Obsolete.**	
PROJECTED_COMPLETION	**DATE/TIME**	**The date THRU-PUT/VPi projects this forecast to be complete. Updated after a scheduling run.**	
ORIG_PROJECTED_COMPLETION	**DATE/TIME**	**Original date THRU-PUT/VPI projects this forecast to be complete. This date is not updated after a scheduling run.**	
PART_FAMILY_ID	**TEXT (15)**	**Family ID to which this forecast belongs.**	
QTY_ON_ORDER	**NUMBER (DOUBLE)**	**Quantity of the forecast consumed by existing sales orders if THRU-PUT/VPI does Forecast Consumption. Output field.**	
FORECAST_TYPE	**NUMBER (DOUBLE)**	**Output field. Valid values are:** **0 Input Forecast** **1 Pull Signal Forecast** **2 Safety Stock** **3 Unused** **4 Split Forecast** **5 Deleted Forecast.**	

		6 Planning Bill Forecast children	
PARENT_KEY	**NUMBER (DOUBLE)**	**Used during splitting. When a single forecast record is split into multiple forecast records, each split forecast has the original forecast's key in this field.**	
***DEMAND_KEY**	**NUMBER (DOUBLE)**	**Description this entry is pegged to. The unique sales or forecast entry.**	
STATUS	**NUMBER (DOUBLE)**	**Not an input field. Maintained by THRU-PUT/VPI to track the order life cycle. First digit Order type 0 New order 1 Old order Second digit Reserved status 0 Not reserved 1 DDQ tested 2 Unprocessed 3 Reserved 4 Confirmed 5 Overdue 6 Interplant Third digit Schedule status 0 Unscheduled 1 Scheduled 2 Closed.**	
BUFFER_REMAINING	**NUMBER (DOUBLE)**	**Shipping buffer remaining for the projected completion date. Updated by Symphony and used in order board matching.**	
FLEX_MIN_BUFFER	**NUMBER (DOUBLE)**	**Flexible Minimum buffer for the projected completion date. Updated by Symphony and used in order board matching.**	
LOCATION_ID	**TEXT (15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.**	
CUSTOMER_ID	**TEXT (15)**	**All customers in the supply chain, including the entity in which THRU-PUT/VPI is implemented.**	
CUSTOMER_LOCATION_ID	**TEXT (15)**	**Downloaded field; with Customer_ID, uniquely identifies the designation for a specific order. Affects forecast consumption. Useful in internal supply chains when the same product is shipped to multiple locations.**	
PREV_KEY	**NUMBER**	**Written by DBUtil for old orders as a result of order-board matching. Allows the**	

	(DOUBLE)	Resynchronization process to continue pegging orders.	
COMMIT_DATE	DATE/TIME	Maintained by the Customer Collaboration function. A flag in the Synchronization engine automatically modifies this date with the projected completion during the Write Schedule pass. DBUtil copies the value from session to session for existing orders. For new orders, the date is automatically set to 01/01/1901.	
NEED_DATE	DATE/TIME	Maintained by the Customer Collaboration function. DBUtil copies the value from session to session for existing orders. For new orders, set to the target date.	
ORIGINAL_TARGET_DATE	DATE/TIME	Maintained by DBUtil.	
LAST_MODIFIED	TEXT (20)	If set to collaboration, DBUtil retains the target date.	

JIP(I) TABLE:

Contains the information regarding currently progressing work order operations (long running). This could be also used to guide Constraint schedule to specify what is the currently running set up.

Column Name	*Field Type*	*Description*		*Default value*
*WORK_ORDER_ID	TEXT (25)	Workorder ID.		
*PART_ID	TEXT (40)	Unique identifier for this part in the supply chain.		
*JOB_STEP_ID	NUMBER(DOUBLE)	If this inventory is WIP, represents the job step ID in which the WIP is found. -1 Raw materials QOH		

		-2 FGI		
*WORKCENTER_ID	TEXT (15)	If this inventory is WIP, represents the job step ID in which the WIP is found. -1 Raw materials QOH -2 FGI		
*WORKCENTER_UNIT	NUMBER(DOUBLE)	Unit number of a machine in the Workcenter.		
QTY_IN_PROCESS	NUMBER(DOUBLE)	Indicates Quantity in progress for this workorder for the mentioned operation.		
SETUP_TIME_REMAINING	NUMBER(DOUBLE)	Indicates Setup time remaining to complete the mentioned operation for this workorder. This value is in seconds.		
RUN_TIME_REMAINING	NUMBER(DOUBLE)	Indicates Run time remaining to complete the mentioned operation for this workorder. This value is in seconds.		
LOCATION_ID	TEXT (15)	Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.		

JSBOM(I) TABLE:

Contains standard bill of Material Information. Work order specific component information can be overrriden in WOALLOC table summarized later.

Column Name	Field Type	Description	Default value

*PARENT_PART_ID	TEXT (40)	Parent Part ID	
*PARENT_JOB_STEP_ID	NUMBER (DOUBLE)	Job step at which the child part is required for manufacturing the parent.	
*PART_ID	TEXT (40)	Unique identifier for this part in the supply chain.	
QTY_PER_PARENT	NUMBER (DOUBLE)	How many pieces of part is required to manufacture the parent part.	
*EFFECTIVE_FROM	DATE/TIME	Starting date when this relationship is valid	
*EFFECTIVE_TO	DATE/TIME	Ending date when this relationship is valid.	
*PARENT_ROUTE_ID	TEXT (15)	Unique identifier for Route process on which this component is required by Parent Part. This will have a corresponding match on ROUTE_ID column in ROUTE table.	
*LOCATION_ID	TEXT (15)	Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.	

PART (I) TABLE:

Contains all the active items in the Item master which are included in Thru-Put/VPi planning and scheduling.

Column Name	Field Type	Description	Default value
*PART_ID	TEXT (40)	Unique identifier for this part in the supply chain.	
PART_DESC	TEXT (60)	Description of the part.	
QTY_ON_HAND	NUMBER (DOUBLE)	The quantity on hand for this Part. Obsolete and Moved into newly created INVENTORY table.	
PART_TYPE	NUMBER (DOUBLE)	Indicates whether the part is one of the following: 0 Part with independent demand 1 Purchase item 2 Other part 3 Subcontract part.	

MANUFACTURE_UOM	**TEXT (15)**	**A field in the Part file that specifies the unit in which the Quantity of an item is managed.**	
SAFETY_STOCK	**NUMBER (DOUBLE)**	**A quantity of stock in inventory to protect against fluctuations in Demand or supply.**	
MRP_LEAD_TIME	**NUMBER (DOUBLE)**	**The minimum lead time required to expedite a purchase (raw) Material. If a material shortage within the minimum lead time exists, the order is pushed out. If shortages beyond the minimum lead time exist, THRU-PUT/VPI assumes that expediting the material from the vendor will satisfy these Shortages. Specified in the number of working days in the Default calendar.**	
CONSUME_FORECAST	**TEXT (1)**	**The forecast for the part defined in Part ID has been consumed. Valid values are: Y Forecast consumed N Forecast unconsumed. If the forecast is unconsumed, the forecast is reduced by customer orders and the remaining quantity is Scheduled in the plant.**	
PLANNING_FENCE	**NUMBER (DOUBLE)**	**The time period in the planning horizon inside of which changes to the schedule may adversely affect component schedules, capacity plans, customer Deliveries, and cost.**	
AGGREGATION_PERIOD	**NUMBER (DOUBLE)**	**The number of days over which orders are aggregated, for items using aggregation period as their Replenishment/lot sizing policy**	
PURCHASE_MULTIPLE_OF	**NUMBER (DOUBLE)**	**A multiple by which requirements are rounded up when purchase Orders are generated. See Minimum_Lot_Size for an explanation of the relationship Between these two fields.**	
MIN_LOT	**NUMBER (DOUBLE)**	**An upper limit on the quantity of every CPO generated during the Master planning process. Used in all lot-sizing policies except Lot-for-lot.**	
ANALYST_ID	**TEXT (15)**	**The planner responsible for a Part.**	
COST	**NUMBER (DOUBLE)**	**The average purchase price for A part. Relevant only for purchased parts and raw Materials.**	
LOT_SIZING_POLICY	**NUMBER (DOUBLE)**	**A field in the Part file that contains a code used during the master planning process to indicate the lot-sizing technique Selected for a given item. Lot sizing policy is applied while**	

		generating CPOs against independent demand (unconsumed portion of the forecast and customer orders) For every item. Valid codes are: 0 Lot for lot **1 Daily rate** **2 Aggregation period** **3 Pull signal.** **The lot-sizing policy considers dependent demand for the item when applied to stock-type Items.**	
PHANTOM_TYPE	**NUMBER (DOUBLE)**	**The part defined in Part_ID is a Phantom part. Valid values are: 0 Non-phantom (default) 1 Phantom Phantom parts are a group of pieces commonly made Together.**	
REORDER_POINT	**NUMBER (DOUBLE)**	**The expected consumption of an Item during the planning fence.**	
MIN_LEVEL	**NUMBER (DOUBLE)**	**One of the parameters used by Pull signal lot-sizing policy. If the POH at planning fence drops below this value, CPOs are generated to raise the inventory Back to the minimum level. CPOs are made due at the Planning fence. Synonymous With safety stock.**	
FC_FAMILY_ID	**TEXT (15)**	**A field in the part file used to support forecasts at the part Family level. THRU-PUT/VPI consumes the forecast against customer orders for items that belong to this Forecast family.**	
SELLING_PRICE	**NUMBER (DOUBLE)**	**The average selling price per Unit.**	
RAW_MATERIAL_TYPE	**NUMBER (DOUBLE)**	**Type of raw material. Meaningful only for parts that are raw Materials (Part Type 1). Valid values are: 0 Normal 1 Ignore 2 Priority.**	
BUYER_LEAD_TIME	**NUMBER (DOUBLE)**	**The lead time, in days, for buyer Action if this is a raw material.**	
DOCK_TO_STOCK_LEAD_	**NUMBER**	**A field in the Part file that specifies the amount of time required to move a part from the**	

TIME	**(DOUBLE)**	**Shipping dock to stock. A raw material is available on the shop floor after MRP_Lead_Time + Buyer_Lead_Time + Dock_To_Stock_Time.**	
BUYER_ID	**TEXT (15)**	**The buyer for a raw material.**	
P_TO_M_CONV_FACTOR	**NUMBER (DOUBLE)**	**The factor by which one quantity Is converted to another.**	
PURCHASE_UOM	**TEXT (15)**	**The unit of measure in which the Quantity of an item is purchased.**	
PRIMARY_ROUTE_ID	**TEXT (15)**	**Identifies the primary route this part follows, if the routing file has multiple routes specified for this Part.**	
PART_CODE	**NUMBER (DOUBLE)**	**Indicates whether a part is an MPS item (make-to-stock). Valid values are: 0 Non-MPS 1 MPS item.**	
MAX_LEVEL	**NUMBER (DOUBLE)**	**Indicates maximum level of inventory to be retained for the given item in component shop. This is one of the parameters used by Pull signal lot-sizing policy. Such items at intermediate levels of product structure can be defined as Replenishment items(Kanban items) and their schedules can be driven by Minimum and Maximum levels of inventory instead of shipping/drum buffer.**	
PLANNING_BILL_PART	**NUMBER (DOUBLE)**	**Specifies whether a part is a Planning bill part. Valid values are: 0 No (default) 1 Yes.**	
PRIMARY_VENDOR_ID	**TEXT (15)**	**The primary vendor for this part.**	
MAKE_MAX_LOT	**NUMBER (DOUBLE)**	**Used for sales splitting. When this field is set, THRU-PUT/VPI ensures that work orders for this part do Not exceed this amount.**	
YIELD	**NUMBER (DOUBLE)**	**Used during purchasing as a factor to account for loss of Material due to some error. Automatically adjusts the quantity of the purchase order based on how much is typically scrapped for this part, defined in Part_ID.**	
MIN_MRP_LEAD_TIME	**NUMBER (DOUBLE)**	**The minimum lead time required to expedite a purchase (raw) Material. If a material shortage within the minimum lead time exists, the order is pushed out. If shortages beyond the minimum lead time exist, THRU-PUT/VPI assumes that expediting the material from the vendor will satisfy these Shortages. Specified in the**	

		number of working days in the Default calendar.	
VENDOR_LOCATION_ID	TEXT (15)	The specific plant for the vendor For whom this rule applies.	
PRODUCT_FAMILY	TEXT (25)	Used in CSW. You can reallocate resources among different products within a Specific product family.	
CORPORATE_PART	TEXT (1)	If similar parts in the supply chain are identified in a part cross-reference table, this ID is used in the Supply Chain Planning module to represent Those parts.	
*LOCATION_ID	TEXT (15)	Plant ID when you installed THRU-PUT/VPI. Unique value across the Internal supply chain. Downloaded when data for more Than one plant are downloaded.	
RESCHEDULE_FLAG	NUMBER (DOUBLE)	Default reschedule code of mentioned part used for planning, if not downloaded in PURCHASE/WOHEAD tables. One of the following: 0 Default to item reschedule code 1 No automatic rescheduling 2 Reschedule out only 3 Reschedule in only 4 Reschedule both out and in 5 No rescheduling; no exception messages; schedule planned orders as required 6 Defer exception only but schedule others earlier.	
FROZEN_PERIOD	NUMBER (DOUBLE)	Used to decide frozen period fence by adding this number to Current_Date. This value is in days. It is used only for VPi planning to compute the reschedule flag. If Due Date of WO is within the frozen fence, then the given WO can't be pulled-in or pushed out.	
DEMAND_FENCE	NUMBER (DOUBLE)	Indicates Forecast Fence by Part Number. This is used in dropping the forecast. Earlier, this was a global setting in DBUtil (order board option page). Now, this is part specific.	
MINIMUM_SHIPPING_BUFFER	NUMBER (DOUBLE)	Indicates part-specific flexible minimum shipping buffer. This value is in hours. If this value is non-zero, then you can override the global shipping buffer specified in config.ini/database table. Each shippable product can have its own value for shipping buffer value. This functionality very useful where you have independent orders for long lead items (end products) and short lead time. You can specify a large buffer for a	

		long lead item and less for a short lead item. We think this may be very useful in make order assembly environment also.	
TYPICAL_SHIPPING_BUFFER	NUMBER (DOUBLE)	Indicates part-specific flexible minimum shipping buffer. This value is in hours. If this value is non-zero, then you can override the global shipping buffer specified in config.ini/database table. Each shippable product can have its own value for shipping buffer value. This functionality very useful where you have independent orders for long lead items (end products) and short lead time. You can specify a large buffer for a long lead item and less for a short lead item. We think this may be very useful in make order assembly environment also.	
PLAN_PROFILE_NAME	TEXT (15)	Applicable when using Sourcing rules feature.	

PURCHASE(I) TABLE:

All incoming purchase orders and firm Planned Purchase orders are included in this table. If PO requisitions are included they are treated just like firm planned purchase orders.

Column Name	Field Type	Description	Default value
ORDER_ID	TEXT(15)	Purchase order ID	
LINE_NUMBER	NUMBER(DOUBLE)	Line number for purchase order	
PART_ID	TEXT(40)	Unique identifier for this part in the supply chain.	
DUE_DATE	DATE/TIME	For new POs, populated by the date downloaded from the ERP system. For existing POs on which collaboration has been performed, the software maintains this value by download PO matching	
ORDER_QTY	NUMBER(DOUBLE)	Order quantity.	
BUYER_ID	TEXT(15)	The buyer for a raw material.	

VENDOR_ID	**TEXT(15)**	**The vendor in the SC_VENDOR_MASTER table for which this rule applies.**	
***DEMAND_KEY**	**NUMBER(DOUBLE)**	**Description this entry is pegged to. The unique identifier for purchase records.**	
PARENT_KEY	**NUMBER(DOUBLE)**	**Downloaded field**	
STATUS	**NUMBER(DOUBLE)**	**Modified by the user in the material planning module. Value is changed during the Write Schedule pass. Possible values: 0 Normal 1 Modified 2 Added 4 Split 5 Deleted 6 Merged.**	
LOCATION_ID	**TEXT(15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.**	
VENDOR_LOCATION_ID	**TEXT(15)**	**Downloaded field This purchase order is purchased from this specific location of this vendor. The specific plant for the vendor for whom this rule applies.**	
UNIT_COST	**NUMBER(DOUBLE)**	**Cost per piece for the part purchased in the PO line.**	
COMMIT_DATE	**DATE/TIME**	**Maintained by Supplier Collaboration. DBUtil copies the value from session to session for existing orders. For new orders, the date is automatically set to 01/01/1901**	
QTY_RECEIVED	**NUMBER(DOUBLE)**	**Downloaded field The quantity of the PO already received. PO quantity due is PO quantity minus the Quantity received.**	
RELEASE_NUMBER	**NUMBER(DOUBLE)**	**Downloaded field Used to capture multiple releases for the same PO number and PO line number combination. Used as part of the key.**	
FIRM_RELEASE	**TEXT(1)**	**Downloaded field**	
NEED_DATE	**DATE/TIME**	**The buyer can manually populate this field using Buyer Collaboration. A flag in the Synchronization engine automatically updates this field with a minimum purchase order exception date for this purchase order and purchase-order line**	
ORIGINAL_DATE	**DATE/TIME**	**Populated by DBUtil with the due date for new purchase orders.**	
MODIFIED_BY	**TEXT(15)**	**If the purchase order has been modified by**	

		collaboration, THRU-PUT/VPI has the master dates. The downloaded purchase order due date is ignored. If the purchase order has not been modified, the PO due date is replaced with the downloaded date. Possible values: 0 None 1 Synchronization Engine 2 Collaboration	
NEED_QTY	NUMBER(DOUBLE)	The quantity the schedule needs against this purchase order. Generated as an output of the Synchronization engine.	
COMMIT_QTY	NUMBER(DOUBLE)	The quantity committed by the supplier during Collaboration.	
PLAN_DATE	DATE/TIME	Reserved for future use	
PLAN_QTY	NUMBER(DOUBLE)	Reserved for future use	
ENTRY_DATE	DATE/TIME	Date on which this purchase order was downloaded to DBUtil.	
RESCHEDULE_FLAG	NUMBER(DOUBLE)	Default reschedule code of mentioned part used for planning, if not downloaded in PURCHASE/WOHEAD tables. One of the following: 0 Default to item reschedule code 1 No automatic rescheduling 2 Reschedule out only 3 Reschedule in only 4 Reschedule both out and in 5 No rescheduling; no exception messages; schedule planned orders as required. 6 Defer exception only but schedule others earlier.	
ORDER_TYPE	TEXT(1)	Contains the Order Type and can be blank also.	
SALES_ORDER_ID	TEXT(15)	Indicates end Customer ORDER_ID. User can optionally download the end customer ORDER_ID in this field if the MO/PO is hard-pegged to a particular SALES order. Please note that when you do hard-peg a MO/PO, the part needs to be non-lotsized (no order modifiers/aggregation etc) so are it's parent items reaching until the final product for which there is a sales order. Also, make sure when you specify an order to be hard-pegged, that order_ID do exists in SALES download. Otherwise, this MO/PO gets unused and a new suggested MO/PO will be created. Please note that when you hard-peg a work order, it is best to keep the work order open until the order is shipped instead of receiving to On Hand.	

ROUTE (I) TABLE:

Contains standard and alternate route information for make item listed in the Item master or PART table. Thru-Put/VPi will follow the operations specified for a given item in this table and recommend future work orders as per the routing records.

Column Name	Field Type	Description	Default value
*PART_ID	TEXT (40)	Unique identifier for this part in the supply chain.	
*JOB_STEP_ID	NUMBER (DOUBLE)	If this inventory is WIP, represents the job step ID in Which the WIP is found. -1 Raw materials QOH -2 FGI.	
*ROUTE_ID	TEXT (15)	Sequence number of item process.	
ROUTE_PRIORITY	NUMBER (DOUBLE)	Indicates if this is PRIMARY ROUTE or an ALTERNATIVE_ROUTE. If value is 0 for this field, then it indicates PRIMARY_ROUTE; and if > 0, it indicates ALTERNATIVE_ROUTE.	
WORKCENTER_ID	TEXT (15)	Work center ID for this job step ID/part combination.	
BATCH_SIZE	NUMBER (DOUBLE)	Indicates maximum number of pieces which can be processed at same time. E.g. A value of 100 for an oven-type operation indicates that 100 pieces of that item can be placed in the oven simultaneously and that the oven will take as much time to bake one piece of the item, as it will for 100 pieces. This factor affects the rope length calculation and drum scheduling if this work center is identified as a drum. This field can have only positive integer number.	
SETUP_TIME	NUMBER (DOUBLE)	Reserved for future use.	
RUN_TIME_PER_BATCH	NUMBER (DOUBLE)	Reserved for future use.	
IDLING_TIME_PER_BATCH	NUMBER (DOUBLE)	Reserved for future use.	
YIELD	NUMBER (DOUBLE)	Used during purchasing as a factor to account for loss of Material due to some error. Automatically adjusts the quantity of the purchase order based on how much is typically scrapped for this part, defined in	

		Part_ID.	
FAMILY_ID	**TEXT (15)**	**Indicates MAJOR FAMILY ID and is used to group operations with a common setup. The setup is saved if back-to-back operations scheduled on the drums have the same Family ID. The complete setup is avoided if the back-to-back operations are the same (same part and job step). A minor setup is incurred if the back-to-back operations are not the same but belong to the same family. A major (full) setup is incurred in all other cases.**	
PART_TYPE	**NUMBER (DOUBLE)**	**Indicates whether the part is one of the following: 0 Part with independent demand 1 Purchase item 2 Other part 3 Subcontract part.**	
JOB_STEP_DESC	**TEXT (40)**	**Description of current operation**	
MINOR_FAMILY_ID	**TEXT (15)**	**Indicates MINOR FAMILY ID and is used to group operations with a common setup. A group of operations with a common minor setup within a major family. Minor setup is saved if back-to-back operations have the same value for Minor_Family_ID.**	
MINOR_SETUP_TIME	**NUMBER (DOUBLE)**	**Setup Time incurred when the drum task following the previous drum task with the same Major_Family but different Minor_Family.**	
CLEAN_UP_TIME	**NUMBER (DOUBLE)**	**Time incurred for cleaning of workcenter. As an example, during an oven operation, once current batch is out, we may want to clean the over or cool the over down before placing next batch.**	
MAX_LOT	**NUMBER (DOUBLE)**	**Obsolete.**	
EFFECTIVE_FROM	**DATE/TIME**	**Starting date when this Relationship is valid.**	
EFFECTIVE_TO	**DATE/TIME**	**Ending date when this Relationship is valid.**	
***LOCATION_ID**	**TEXT (15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the Internal supply chain. Downloaded when data for more Than one plant are downloaded.**	**MANDATORY**
TOOL_ID	**TEXT (15)**	**Downloaded field.**	
LABOR_SETUP_TIME	**NUMBER (DOUBLE)**	**The time taken by labor to do the set up for a given part operation. Time is in seconds.**	

		Useful for determining the labor load.	
LABOR_RUN_TIME_PER_BATCH	**NUMBER (DOUBLE)**	**The time it takes to do complete one batch for a given part operation. Time is in seconds. Useful for determining the labor load.**	
PREFERRED_UNIT	**TEXT (25)**	**Any number between 0 and maximum number units on a given workcenter. Applicable only for drums. If this field is set, software will place the tasks for a particular operation on the specific unit of the workcenter.** **Indicates the most preferred unit on which drum task should be placed for the current operation. This number can't be greater than total working units of workcenter. User can also specify multiple units in sequence on which application should try to place the task while doing drum scheduling. For such cases, they can separate units by dash. As an example, assume drum MLG11X has 5 units. User would like to place drum task on unit 2 and 3 only for this operation. So, he can specify this column value as 2-3.**	
TRANSFER_SIZE	**NUMBER (DOUBLE)**	**If this value is positive and is greater than or equal to Batch Size, then this number will be used in determining the overlap between the operations. This works out very well when two successive operations are on same work center but the work center itself has multiple units. As soon as the first transfer batch size is complete, next operation can be started on another unit, thereby reducing the manufacturing leadtime on a part.** **Applicable for both drums and non-drums.**	
ASSIGNED_UNITS	**NUMBER (DOUBLE)**	**Any number between 0 and maximum number units on a given workcenter. Applicable only for drums .** **Indicates number of units which can be used for processing non-drum task; instead of scheduling complete task on one unit.**	

SALES(I) TABLE:

All customer orders are listed in this table. Please note that primary key autogenerated by Thru-Put/VPi based upon Unique key stored in RESPARA table. This table also should include closed order from current month to track orders efficiently.

Column Name	Field Type	Description	Default value
ORDER_ID	TEXT(15)	ID number of the sales order.	
LINE_NUMBER	NUMBER(DOUBLE)	Line number of sales order.	
PART_ID	TEXT(40)	Unique identifier for this part in the supply chain.	
PROMISE_DATE	DATE/TIME	The date THRU-PUT/VPI uses to set relative priorities.	
CUSTOMER_ID	TEXT(15)	Customer for the sales order. All customers in the supply chain, including the entity in which THRU-PUT/VPI is implemented.	
ORDER_QTY	NUMBER(DOUBLE)	Order quantity for this sales order.	
ORDER_TYPE	NUMBER(DOUBLE)	Obsolete	
EARLIEST_START	DATE/TIME	Obsolete	
QTY_SHIPPED	NUMBER(DOUBLE)	Quantity already shipped.	
REQUEST_DATE	DATE/TIME	Not an input field. THRU-PUT/VPI stores the original promise date of an order. Used during order board matching of daily flow.	
TARGET_COMPLETION	DATE/TIME	Date THRU-PUT/VPI uses to set relative priorities. By default, the promise date. In forecasting, the due date of the forecast.	
PROJECTED_COMPLETION	DATE/TIME	THRU-PUT/VPI's projected completion date of this sales order. Updated after a scheduling run.	
SHIPMENT_STATUS	TEXT(3)	Obsolete.	
STATUS	NUMBER(DOUBLE)	Maintained by THRU-PUT/VPI to track the order life cycle.	
SOURCE	NUMBER(DOUBLE)	Not currently used	

PARENT_KEY	**NUMBER(DOUBLE)**	**Obsolete**	
***DEMAND_KEY**	**NUMBER(DOUBLE)**	**Description this entry is pegged to. The unique sales or forecast entry.**	
SHIPPING_GROUP	**TEXT(15)**	**Group number. If partial shipments are permitted, sales within same group have common delivery dates.**	
BUFFER_REMAINING	**NUMBER(DOUBLE)**	**Shipping buffer remaining for the projected completion date. Updated by Symphony and used in order board matching.**	
SELLING_PRICE	**NUMBER(DOUBLE)**	**The average selling price per unit.**	
ORIG_PROJECTED_COMPLETION	**DATE/TIME**	**Indicates original Projected Completion of sales order.**	
ORDER_BUFFER	**NUMBER(DOUBLE)**		
ORDER_BUFFER_REMAINING	**NUMBER(DOUBLE)**	**Shipping buffer remaining for the projected completion date. Updated by Symphony and used in order board matching.**	
FLEX_MIN_BUFFER	**NUMBER(DOUBLE)**	**Flexible Minimum buffer for the projected completion date. Updated by Symphony and used in order board matching.**	
LOCATION_ID	**TEXT(15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain.**	
CUSTOMER_LOCATION_ID	**TEXT(15)**	**The shipment location for the customer order.**	
PO_NUMBER	**TEXT(15)**	**Downloaded field The purchase order number supplied by the customer who placed the order.**	
PO_LINE_NUMBER	**NUMBER(DOUBLE)**	**Downloaded field The specific purchase order line number that is scheduled. Along with PO number, helps identify the sales order during customer collaboration.**	
COMMIT_DATE	**DATE/TIME**	**Maintained by Customer Collaboration. Synchronization automatically modifies this date with the projected completion date during Write Schedule Pass**	
NEED_DATE	**DATE/TIME**	**The latest need date populated by Customer Collaboration. DBUtil copies the value from session to session for existing orders. For**	

		new orders, set to the original promise date.	
ORIGINAL_PROMISE_DATE	**DATE/TIME**	**Replaces the request date.**	
ORIGINAL_NEED_DATE	**DATE/TIME**	**The initial date that Customer Collaboration populated. Initially set to the original promise date for new orders.**	
AGREED_DATE	**DATE/TIME**	**Maintained by Customer Collaboration. Initially set to the promise date.**	
MODIFIED_BY	**TEXT(15)**	**If modified by Collaboration, THRU-PUT/VPI stores the master dates and downloaded sales due date information is ignored. If the sales order has not been modified by Collaboration, the need date is replaced with the downloaded date for both existing and new orders.**	
PREV_KEY	**NUMBER(DOUBLE)**	**Written by DBUtil for old orders as a result of order-board matching. Allows the Resynchronization process to continue pegging orders.**	
SALES_RELEASE_NO	**NUMBER(DOUBLE)**	**Indicates DUE_TIME for Sales order. If this value is zero, the due time is end of the day based upon the DEFAULT calendar; else schedule will be Due Date + SALES_RELEASE_NO of the Sales orders. If the order is pushed out after Thru-Put/VPi Session, then the new Delivery time will not be rounded to the end of the day and left wherever it will fall and write the New due time in another Column PO_RELEASE_NO. Values in these columns are offset in Seconds from the beginning of the day based upon DEFAULT calendar.** **In order to use this functionality, following config.ini need to be set as below(Second one manually entered)** **OverlapChildAndParentOrdersInAP=1** **EnableMidDayArrivalsAndShipments=1**	
PO_RELEASE_NO	**NUMBER(DOUBLE)**	**Indicates NEW DUE_TIME for Sales order. If the order is pushed out after Thru-Put/VPi Session, then the new Delivery time will not be rounded to the end of the day and left wherever it will fall and write the New due time in another Column PO_RELEASE_NO. Values in this column is offset in Seconds from the beginning of the**	

		day based upon DEFAULT calendar. **In order to use this functionality, following config.ini need to be set as below (Second one manually entered)** **OverlapChildAndParentOrdersInAP=1** **EnableMidDayArrivalsAndShipments=1**	
REQUEST_TIME	**NUMBER(DOUBLE)**		
DEMAND_STARTDATE	**DATE/TIME**		
DEMAND_STARTTIME	**NUMBER(DOUBLE)**		
DEMAND_ENDDATE	**DATE/TIME**		
DEMAND_ENDTIME	**NUMBER(DOUBLE)**		
DEMAND_RATE	**NUMBER(DOUBLE)**		
DELIVERY_STARTDATE	**DATE/TIME**		
DELIVERY_STARTTIME	**NUMBER(DOUBLE)**		
MATL_ORDERNO	**TEXT(15)**		

WKCTR(I) TABLE:

This is facility Master or all the work centers in your shop floor. You can include Labor and Tools if they are indeed decide the processing times on a workcenter. Both outside processing and inside processing work centers are included. A workcenter by definition is a group of machines with identical capability and working hours and are interchangeable.

Column Name	Field Type	Description	Default value
***WORKCENTER_ID**	**TEXT(15)**	**Work center ID for this job step ID/part combination.**	
WORKCENTER_DESC	**TEXT(40)**	**A description of the workcenter defined in WORKCENTER_ID.**	
UNITS	**NUMBER(DOUBLE)**	**The number of identical machines or**	

		resources in the workcenter defined in Workcenter_ID.	
UTILIZATION	NUMBER(DOUBLE)	The utilization of the workcenter defined in Workcenter_ID. A value of 1 implies protective capacity to be left on non-drums to enable them to catch up after Murphy strikes. Valid values are between “0.0” and “1.0”.	
CALENDAR_ID	TEXT(15)	The identifier of a calendar. A default calendar must always exist since a workcenter with no calendar is assumed to work with the default calendar.	
DUMMY_FLAG	TEXT(2)	Y indicates an infinite-capacity workcenter for which there is no need to generate a schedule. 0 Normal 1 Ignore 2 Outside processing operation 4 Final assembly workcenter	
WORKCENTER_FAMILY	TEXT(15)	A group of workcenters with similar capabilities.	
LABOR_MC_RATIO	NUMBER(DOUBLE)	The average number hours of labor required to run the workcenter for an hour.	
FORCED_QUEUE_TIME	NUMBER(DOUBLE)	The amount of time, in seconds, a job is forced to wait in front of a non-bottleneck work center. Applied during Symphony and Harmony Material Release. During Symphony, added on top of dynamic buffering. Uses a 24hour calendar.	
SETUP_TIME	NUMBER(DOUBLE)	Used as default when no routing times present (for modeling purpose only)	
RUN_TIME_PER_BATCH	NUMBER(DOUBLE)	Used as default when no routing times present (for modeling purpose only)	
IDLING_TIME_PER_BATCH	NUMBER(DOUBLE)	Used as default when no routing times present (for modeling purpose only)	
DRUM_NUMBER	NUMBER(DOUBLE)	Output field. The drum number if this workcenter is a drum; otherwise, 0 appears.	
OVERTIME_RATE	NUMBER(DOUBLE)	The average expense for one hour of overtime at the work center.	
MIN_BUFFER_TIME	NUMBER(DOUBLE)	Seconds. Queue time calculated using the default calendar. Used by THRU-PUT/VPI when you turn on flexible buffering mode. Calculates the earliest start times in THRU-PUT/VPI.	

TYPICAL_BUFFER_TIME	**NUMBER(DOUBLE)**	**Seconds. Queue time calculated using the default calendar. Used by THRU-PUT/VPI when you turn on flexible buffering mode. Used to calculate Do Not Do Before dates.**	
SETUP_PERCENTAGE	**NUMBER(DOUBLE)**	**Percent; output by Synchronization engine. Used in CSW on the load to capacity charts. Written when the schedules are written.**	
***LOCATION_ID**	**TEXT(15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain.**	
RESOURCE_TYPE	**TEXT(2)**	**Defines primary or secondary resources. 0 Workcenter 1 Tool**	
ATTRIBUTE1	**TEXT(25)**	**When set to 1, used for scheduling tasks for the same order together (assuming this work center is also a drum)**	
ATTRIBUTE2	**TEXT(25)**	**Reserved**	
ATTRIBUTE3	**TEXT(25)**	**When set to 1, tasks on this drum will be scheduled by Earliest Start Time (assuming this work center is also a drum). Useful if this is an interactive drum and this drum is the downstream drum.**	
ATTRIBUTE4	**TEXT(25)**	**Reserved**	
ATTRIBUTE5	**TEXT(25)**	**Reserved**	
UNITS1	**NUMBER(DOUBLE)**	**Number of Units assigned to 1st Shift when Shift calendar is used else not used**	
UNITS2	**NUMBER(DOUBLE)**	**Number of Units assigned to 2nd Shift when Shift calendar is used else not used**	
UNITS3	**NUMBER(DOUBLE)**	**Number of Units assigned to 3rd Shift when Shift calendar is used else not used**	
DEPARTMENT	**TEXT(15)**	**Department to which Workcenter belongs to.**	

WOALLOC(I) TABLE:

All the component requirement to build an assembly work order. This list is mandatory for an already released assembly work order. If the assembly work order is firm planned, then allocation record is picked from standard BOM (JSBOM table).

Column Name	Field Type	Description	Default value
*WORK_ORDER_ID	TEXT(25)	Workorder ID	
*CHILD_PART_ID	TEXT(40)	Component part	
*SEQUENCE_NUMBER	NUMBER(DOUBLE)	Allocation Number	
QUANTITY_REQUIRED	NUMBER(DOUBLE)	How much quantity of component is required to make full Assembly work order quantity	
QUANTITY_ISSUED	NUMBER(DOUBLE)	How much quantity of component has been allocated to quantity to this Assembly work order	
*JOB_STEP_ID	NUMBER(DOUBLE)	If this inventory is WIP, represents the job step ID in which the WIP is found. -1 Raw materials QOH -2 FGI	
QTY_PER_PARENT	NUMBER(DOUBLE)	Deducted from Quantity Required. You can override by providing per parent quantity in this field	-1
*LOCATION_ID	TEXT(15)	Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.	

WOHEAD(I) TABLE:

This table contains all the released and firm planned work orders currently open or running in the production floor. Any work order that is finished or partial finished (Quantity Good > 0) is considered already received to On hand for Quantity Good and deducted from available quantity (more) from the work order.

Column Name	Field Type	Description	Default value
WORK_ORDER_ID	TEXT(25)	Workorder ID	
PART_ID	TEXT(40)	Unique identifier for this part in the supply chain.	
ORIGINAL_QUANTITY	NUMBER(DOUBLE)	Original Quantity	

QUANTITY_FINISHED	NUMBER(DOUBLE)	Quantity finished	
QUANTITY_SCRAPPED	NUMBER(DOUBLE)	Quantity scrapped	
WORK_ORDER_STATUS	TEXT(1)	Status of work order.	
RELEASE_DATE	DATE/TIME	The date of release	
FIRM_RELEASE	TEXT(1)	Y if yes else No	
LOCATION_ID	TEXT(15)	Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.	
RESCHEDULE_FLAG	NUMBER(DOUBLE)	Reschedule codes of XA	
DUE_DATE	DATE/TIME	When the assembly work order is due.	
WORKORDER_TYPE	TEXT(1)	Released or firm planned	
OFFSET	NUMBER(DOUBLE)	An Advanced Planner engine (VPI) parameter used to filter out exceptions for the firm orders the user has firm scheduled in the engine.	
ROUTE_ID	TEXT(15)	Route Identifier (Not Required)	
SALES_ORDER_ID	TEXT(15)	When work order is allocated to a specific customer order, Order_ID of the sales	
ORIG_WO_ID	TEXT(25)	Work order of the original order when a work order is split	
WO_YIELD	NUMBER(DOUBLE)	Work order specific Yield which overrides the Part Yield of of the item.	

WOROUTE(I) TABLE:

This contains all the operations that a work order goes thru before it is received to stock. Work order details helps to follow routings that are work order specific and distinct from standard routing. If you don't need the uniqueness, you may consider using WIP table instead.

Column Name	Field Type	Description	Default value

***WORK_ORDER_ID**	**TEXT(25)**	**Workorder ID**	
***JOB_STEP_ID**	**NUMBER(DOUBLE)**	**If this inventory is WIP, represents the job step ID in which the WIP is found. -1 Raw materials QOH -2 FGI**	
JOB_STEP_STATUS	**TEXT(1)**	**The status of a job step's completion.**	
WORKCENTER_ID	**TEXT(15)**	**Workcenter for a particular job step.**	
QUANTITY_GOOD	**NUMBER(DOUBLE)**	**The number of pieces for which this job step has been successfully completed.**	
QUANTITY_BAD	**NUMBER(DOUBLE)**	**The number of pieces for which this job step has been unsuccessfully completed**	
PART_ID	**TEXT(40)**	**Unique identifier for this part in the supply chain**	
BATCH_SIZE	**NUMBER(DOUBLE)**	**The type of batch. Valid values are:** **1 Piece operation, > 1 Foundry or oven operation.**	
SETUP_TIME	**NUMBER(DOUBLE)**	**The time, in seconds, required to change a specific machine, resource, workcenter, or line from making the last good piece of item A to the first good piece of item B.**	
RUN_TIME_PER_BATCH	**NUMBER(DOUBLE)**	**The time, in seconds, to run one batch of an item on a workcenter, excluding setup time.**	
IDLING_TIME_PER_BATCH	**NUMBER(DOUBLE)**	**The time, in seconds, during which the batch must wait after being processed at the current step and before being queued at the next step.**	
YIELD	**NUMBER(DOUBLE)**	**Used during purchasing as a factor to account for loss of material due to some error. Automatically adjusts the quantity of the purchase order based on how much is typically scrapped for this part, defined in Part_ID.**	
FAMILY_ID	**TEXT(15)**	**A mechanism to group operations with a common setup. The setup is saved if back-to-back operations scheduled on the drums have the same Family ID.**	
JOB_STEP_DESC	**TEXT(40)**	**Description of the operation.**	
MINOR_FAMILY_ID	**TEXT(15)**	**A group of operations with a common minor**	

		setup within a major family.	
MINOR_SETUP_TIME	**NUMBER(DOUBLE)**	**Time incurred when an operation follows a previous operation with the same Major_Family but different Minor_Family.**	
CLEAN_UP_TIME	**NUMBER(DOUBLE)**	**Time incurred while cleaning.**	
MAX_LOT	**NUMBER(DOUBLE)**	**Obsolete**	
ROUTE_ID	**TEXT(15)**	**The route to which this operation belongs.**	
TOOL_ID	**TEXT(15)**	**Secondary resource required at the operation.**	
***LOCATION_ID**	**TEXT(15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.**	
LABOR_SETUP_TIME	**NUMBER(DOUBLE)**	**The time it takes to do the set up for a given part operation. Time is in seconds. Useful for determining the labor load.**	
LABOR_RUN_TIME_PER_BATCH	**NUMBER(DOUBLE)**	**The time it takes to do complete one batch for a given part operation. Time is in seconds. Useful for determining the labor load.**	
PREFERRED_UNIT	**TEXT(25)**	**Any number between 0 and maximum number units on a given workcenter. Applicable only for drums. If this field is set, software will place the tasks for a particular operation on the specific unit of the workcenter.**	
TRANSFER_SIZE	**NUMBER(DOUBLE)**	**If this value is positive and is greater than or equal to Batch Size, then this number will be used in determining the overlap between the operations.**	
ASSIGNED_UNITS	**NUMBER(DOUBLE)**	**Number of units assigned to a workorder when there are multiple units in play.**	

PART_PROCESS(I) TABLE:

This table supports engine selecting proper process (from primary and alternative), and to support user offloading via alternate processes.
Download option: 0 = Only current primary process (Default),
1 = All primary processes, 2 = All processes

Column Name	Field Type	Description	Default value
***PART_ID**	**TEXT(40)**	**Unique identifer for this part in the supply chain.**	
***PART_REVISION**	**TEXT(6)**	***ERP Item Revision***	
REVISION_START_DATE	**DATE/TIME**	***Revision effective from date***	
REVISION_END_DATE	**DATE/TIME**	***Revision effective to date***	
***ROUTE_ID**	**TEXT(15)**	***Sequence no of the item process***	
DESCRIPTION	**TEXT(40)**	***Process description (XA user supplies)***	
***PRIMARY_PROCESS**	**TEXT(1)**	**Indicates if it is Primary Process or Alternative Process.** ***1-Primary / 0-Alternate***	
PROCESS_START_DATE	**DATE/TIME**	**Valid from date**	
PROCESS_END_DATE	**DATE/TIME**	**Valid to date**	
ERP_ALTERNATE_BOM_ID	**TEXT(10)**	***XA Alternate BOM ID.***	
ERP_ROUTING_ID	**TEXT(15)**	***XA Routing ID***	
ERP_ROUTING_VERSION	**TEXT(6)**	***XA Routing version.***	
LOCATION_ID	**TEXT(15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.**	

PARTALLOC(I) TABLE:

This table contains information on the allocation records for each hard pegged on hand qty.

Column Name	Field Type	Description	Default value
*PART_ID	TEXT(40)	Unique identifier for this part in the supply chain.	
ALLOC_QTY	NUMBER(DOUBLE)	Quantity for current lot of QOH.	
CUSTOMER_ORDER_ID	DATE/TIME	Indicates the Sales Order ID consuming this QOH lot.	
*ALLOC_REF_ID	TEXT(15)	Indicates the customer location of Sales Order consuming this QOH lot. During planning, the CUSTOMER_LOCATION_ID of Sales order is matched with ALLOC_REF_ID. Only sales orders from the same customer location will consume the Hard Allocated QOH.	
*LOCATION_ID	TEXT(15)	Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.	
BATCHLOT_ID	TEXT(25)	Contains the batch identifier and can be blank also.	
EXPIRY_DATE	DATE/TIME	Stores the date of expiration of the part QOH for the line.	
QA_HOLD	NUMBER(DOUBLE)	Indicates if the given lot is available for consumption or has been put on hold because of quality check. Can have a value of 0 or 1.	

INVENTORY(I) TABLE:

This table contains QTY_ON_HAND value for those parts which exists in Part table. The QTY_ON_HAND column is obsolete in PART table.

Column Name	Field Type	Description	Default value
***PART_ID**	**TEXT(40)**	**Unique identifier for this part in the supply chain.**	
QTY_ON_HAND	**NUMBER (DOUBLE)**	**The quantity on hand for the Parts.**	
***LOCATION_ID**	**TEXT(15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the internal supply chain. Downloaded when data for more than one plant are downloaded.**	

Table Layout of Schedule Output Tables

Thru-Put/VPi writes on hand and work in process allocation (T_FROM_INV), work center operation schedules (T_TO_MAKE), Purchase order and PO requisition information(T_MATL_REQ), Bottle neck Schedules (BNSCHED) and work order schedule (T_INTERNAL_DEMAND). For easy reporting and association with the kitting, Thru-Put/VPi also writes the component Supply allocation in T_DEMAND_PEGGING, and component to final customer or forecast order allocation to T_DEMAND_MAPPING tables.

T_FROM_INV:

Contains the current inventory information; what is in stock and what is the location of work in process. Number of records to this table does not depend upon any config.ini parameters.

Column Name	Field Type	Description	Default value

INV_KEY **(inventory key)**	**NUMBER (DOUBLE)**	**An internal key generated by the software to identify this inventory uniquely.**	
FEEDING_MAKE_KEY	**NUMBER (DOUBLE)**	**MAKE_KEY of the open work order operation job step along the woroute where this inventory is being consumed. If the part is finished is on hand this value will be –1. You will see this record in WOROUTE table with some quantity finished along a job step in the WOROUTE.**	
FEEDING_DRUM_KEY **(Not applicable to VPi and is always –1)**	**NUMBER (DOUBLE)**	**MAKE_KEY of the open work order drum operation job step along the route/woroute where this inventory is needed. Note the work order can be for itself or for its assembly (if the part is not lot sized).**	
DEMAND_KEY	**NUMBER (DOUBLE)**	**DEMAND_KEY of the work. You will find this demand key value in T_INTERNAL_DEMAND table. If the inventory is feeding directly to a final order (sales/forecast), you will find this key in SALES/FORECAST table with the same name.**	
PART_ID	**TEXT(40)**	**Part ID of the work order/PO.**	
JOB_STEP_ID	**NUMBER (DOUBLE)**	**Operation Job Step. He location where the invenory is sitting. If on hand then this value is negative: –1 for normal and –2 for raw materials/buy parts.** **If the work order is just released with all its component already allocated then this value is 0. Otherwise job step id in the work order route.**	
QTY	**NUMBER (DOUBLE)**	**Quantity of this inventory pegging.**	
DDB_DATE **Start date of the task**	**DATE/TIME**	**Start date of the task when this inventory is needed. It can be projected completion of the final customer order/forecast if directly fed to them. Or it can be start date of the work order feeding operation. If the date is 12/31/2075 then this inventory is never needed.**	
WORKORDER_ID	**TEXT(25)**	**Work order ID where this inventory is found. If the inventory is on hand, then this value is blank.**	

WORKCENTER_ID	**TEXT(15)**	**Work center ID or facility name where this inventory is found. Blank if on hand.**	
PARENT_WORKCENTER_ID	**TEXT(15)**	**Feeding Work center ID or facility name where this inventory is consumed. Blank if on hand and feeding to final sales/forecast order.**	
LOCATION_ID	**TEXT(15)**	**Warehouse or location ID of the manufacturing plant.**	
ALLOC_REF_ID	**TEXT(15)**	**Reference ID.**	

T_TO_MAKE:

Contains MAKE information of individual operation starts on a work order and its other detailed information. For all open work orders, all operation starts are written to this table regardless of when the operation starts. How much data is written to this table for a suggested work order (RWO) depends upon config.ini parameter "NonDrumOutputHorizon". This parameter is a number in days from the current planning date until which all the operation starts need to be written if a planned work order (RWOxxx) needs to start. Even if one out all operation of a routing needs to be started, then all the operation for that work order are written to T_TO_MAKE table. Phantom parts and dumpy operations are not written to this table.

Column Name	Field Type	Description	Default value
MAKE_KEY	**NUMBER (DOUBLE)**	**An internal key generated by the software to identify this job information uniquely.**	
PARENT_MAKE_KEY	**NUMBER (DOUBLE)**	**The T_TO_MAKE record this record feeds to next job step in sequence.**	
FEEDING_DRUM_KEY **(Not applicable to VPI and is always –1)**	**NUMBER (DOUBLE)**	**MAKE_KEY of the drum operation job step along the route/woroute where this part is needed. Note the work order can be for itself or for its assembly (if the part is not lotsized)**	
DEMAND_KEY	**NUMBER (DOUBLE)**	**DEMAND_KEY of the work order. You will find this demand key value in T_INTERNAL_DEMAND table.**	
WORKORDER_ID	**TEXT (25)**	**Work order ID where this inventory is found. If the inventory is on hand, then this value is blank.**	

JOB_STEP_ID	**NUMBER (DOUBLE)**	**Operation Job Step. He location where the invenory is sitting. If on hand then this value is negative: –1 for normal and –2 for raw materials/buy parts.** **If the work order is just released with all its component already allocated then this value is 0. Otherwise job step id in the work order route.**	
RUN_TIME	**NUMBER (DOUBLE)**	**Runtime for this order on this job step.**	
QTY	**NUMBER (DOUBLE)**	**Quantity of this task.**	
DDB_DATE **Start date of the task**	**DATE/TIME**	**Start date of the task when this inventory is needed. It can be projected completion of the final custom order/forecast if directly fed to them. Or it can be start date of the work order feeding operation. If the date is 12/31/2075 then this inventory is never needed.**	
DDB_TIME **Start time of the task**	**NUMBER (DOUBLE)**	**Start time of the task within the day in seconds from beginning of the day.**	
WORKCENTER_ID	**TEXT (15)**	**Work center ID or facility name where this inventory is found. Blank if on hand.**	
BUFFER_TOTAL_HRS	**NUMBER (DOUBLE)**	**Total buffers in hours planned for this job. In case of VPI, this value is up to final SALES/Forecast order. This value is computed from adding TYPICAL_BUFFER_TIME of facility in WKCTR table along the feeding chain + shipping buffer.**	
BUFFER_REMAINING	**NUMBER (DOUBLE)**	**Buffers in hours remaining for this job.**	
BUFFER_TYPE	**NUMBER (DOUBLE)**	**Type the feeding buffer whether it is shipping buffer or workcenter buffer.**	
BUFFER_FED	**TEXT (15)**	**Feeding Work center ID or facility name associated with the feeding buffer. Blank if feeding the final order.**	
MAKE_TYPE	**NUMBER (DOUBLE)**	**1 Material Release step** **0 Not a Material Release step**	

LOCATION_ID	**TEXT (15)**	**Warehouse or location ID of the manufacturing plant.**	
TOOL_ID	**TEXT (15)**	**Secondary resource required at the operation.**	
PART_ID	**TEXT (40)**	**Part or Item number**	
ROUTE_ID	**TEXT (15)**	**The route on which this work order is to be made. This information can be used to tell THRU-PUT/VPI to pick up the routing standards information for this operation from the Routing master.**	
DELAY_TIME	**NUMBER (DOUBLE)**	**Used in Visual Planner to fix the start time of an operation on a facility or workcenter**	
WORKCENTER_UNIT	**NUMBER (DOUBLE)**	**Unit number of a machine in the workcenter.**	
SETUP_TIME	**NUMBER (DOUBLE)**	**For future use.**	
LDB_DATE	**DATE/TIME**	**Latest due date for this operation**	
LDB_TIME	**NUMBER (DOUBLE)**	**Latest due time for this operation**	
LABOR_RUN_TIME	**NUMBER (DOUBLE)**	**Total run time labor required to process this task**	
LABOR_SETUP_TIME	**NUMBER (DOUBLE)**	**Labor time required to set up this operation.**	

T_MATL_REQ:

Contains Material Requirement information regarding where the raw material are required and where they are consumed (pegging information). Number of records to this table does not depend upon any config.ini parameters.

Column Name	Field Type	Description	Default value
	NUMBER (DOUBLE)	**MAKE_KEY of the feeding operation job step You will see this record in T_TO_MAKE with this MAKE_KEY**	

Column Name	Field Type	Description	Default value

FEEDING_MAKE_KEY	**NUMBER (DOUBLE)**	**MAKE_KEY of the feeding operation job step You will see this record in T_TO_MAKE with this MAKE_KEY**	
FEEDING_DRUM_KEY	**NUMBER (DOUBLE)**		
MR_KEY	**NUMBER (DOUBLE)**	**MAKE_KEY of the drum operation job step along the route/woroute where this part is needed.**	
PO_KEY	**NUMBER (DOUBLE)**	**The DEMAND_KEY of the purchase order. If the PO is open, this value will match with DEMAND_KEY in PURCHASE table. If PO is planned, this will match with DEMAND_KEY in the T_PLANNED_PO table.**	
DEMAND_KEY	**NUMBER (DOUBLE)**	**DEMAND_KEY of the work order . You will find this demand_key value in T_INTERNAL_DEMAND table. If PO is feeding directly to a final Sales/Forecast order, this value will match with DEMAND_KEY in SALES/FORECAST table.**	
QTY	**NUMBER (DOUBLE)**	**Quantity of this task**	
PO_REQ_DATE	**DATE/TIME**	**Expected Dock Arrival date of the PO.**	
PO_MOD_DATE	**DATE/TIME**	**Modified PO Dock date. Date when PO is actually needed as per the scheduling requirement. Set to 12/31/2075, if there is no requirement and PO needed to be cancelled.**	
LOCATION_ID	**TEXT(15)**	**Warehouse or location ID of the manufacturing plant**	
PART_ID	**TEXT(40)**	**Part/Item Number**	
PO_FLAG	**TEXT(20)**	**Flag of the Purchase Order.**	
PART_TYPE	**NUMBER (DOUBLE)**	**Item type, Raw (1) or subcontract(3) or Make 0**	
RAW_MATERIAL_TYPE	**NUMBER (DOUBLE)**	**Type of raw material used.**	
SALES_ORDER_ID	**TEXT(15)**	**Final ORDER_ID of the customer order or Forecast where this will be consumed. If there are multiple orders, the Final order with first requirement will be shown. Blank if no final**	

		demand for this material requirement.	

T_INTERNAL_DEMAND:

This table contains the information about all work orders for lot-sized parts (always true in VPi) and hard pegged work orders. This will also contain the purchase order details provided the part lot sized and is a consigned part or a make part.

If a part is not lot sized, then work orders due dates will not drive the schedules. Schedule will be driven by the parent assembly work order (if the parent part is lot sized) or the final independent demand (sales/forecast). If you set the parameter DeclareAllPartsAsMPS=1 in the config.ini file (this parameter may be obsolete in future versions), then all parts are treated like a lot sized part with lot for lot.

In order to declare a part as lot sized, you need to set one or more of the following parameters to a value greater than 0 (in the PART download/table):

AGGREGATION_PERIOD

MIN_LOT

PURCHASE_MULTIPLE_OF

There is another way you can still force writing work order to the T_INTERNAL_DEMAND irrespective whether it is a lot sized part or not. In config.ini, add a configuration parameter in the [System] section called WriteNonLotsizedWOToDB=1

Column Name	Field Type	Description	Default value
DEMAND_KEY	**NUMBER (DOUBLE)**	**An internal key generated by the software to identify this work order uniquely. This is sometimes referred to as internal_demand_key.**	
PART_ID	**TEXT(40)**	**Part ID of the work order/PO.**	
WORKORDER_ID	**TEXT(25)**	**Work order ID or the purchase order id.**	
START_DATE	**DATE**	**The start date of the work order. This date will be equal to DDB_DATE for the first jobstep of the work order. Provided DDBEqualsToStartTime=1 in config.ini.**	
START_TIME	**NUMBER**	**Start time of the day in seconds.**	

	(DOUBLE)		
DUE_DATE	**DATE**	**The Completion date of the work order. This date will be generally one day prior to the start of the parent work order. You can set to same date by setting OverlapParentChildWOID=1 in config.ini**	
DUE_TIME	**NUMBER (DOUBLE)**	**End time of the Work order in seconds.**	
QTY	**NUMBER (DOUBLE)**	**Work order Quantity Open and scheduled.**	
POSEQ	**NUMBER (DOUBLE)**	**A number starting from 30001 to be used with XA integration only. Automatically generated by the software.**	
RESCHED_FLAG	**NUMBER (DOUBLE)**	**The workorder (order) reschedule code. One of the following: 0 Default to item reschedule code 1 No automatic rescheduling 2 Reschedule out only 3 Reschedule in only 4 Reschedule both out and in 5 No rescheduling; no exception messages; schedule planned orders as required 6 Defer exception only but schedule others earlier.**	
BOM_LEVEL	**NUMBER (DOUBLE)**		
INTERNAL_DEMAND_TYPE	**NUMBER (DOUBLE)**		
EST_SOURCE	**TEXT (127)**		
LOCATION_ID	**TEXT (15)**		

T_DEMAND_PEGGING:

This table contains the information about the one level source of demand for a work order. This table will have data only when T_INTERNAL_DEMAND data has the data. Basically, the record will give information on the assembly work order who will be using the work order specified in the T_INTERNAL_DEMAND table.

Column Name	Field Type	Description	Default value

UNIQUE_KEY	**NUMBER (DOUBLE)**	**A unique number generated by the software to distinguish the work order. Normally, this key will not be much use. But in cases where a same work order is feeding same assembly work orders in two different operations, then UNIQUE_KEY will distinguish the two records.**	
CHILD_KEY	**NUMBER (DOUBLE)**	**The internal_demand_key of the child work order.**	
PARENT_KEY	**NUMBER (DOUBLE)**	**The internal_demand_key of the parent work order. If the child work order is not pegged then this value will be –1.**	
PARENT_MAKE_KEY	**NUMBER (DOUBLE)**	**The MAKE_KEY of the parent work order job-step where the component is needed. This will match with MAKE_KEY in T_TO_MAKE table. If the child work order is not pegged then this value will be –1.**	
QTY	**NUMBER (DOUBLE)**	**Quantity of the child work order pegged to the parent work order.**	
REQ_DATE	**DATE/TIME**	**Component Required date**	

T_DEMAND_MAPPING:

This table contains the information about the end level source of demand for any lot sized work order. This table will have data only when T_INTERNAL_DEMAND data has the data. Basically, the record will give information on the work order and for which independent demand the work order is being used.

Column Name	Field Type	Description	Default value

INTERNAL_DEMAND_KEY	**NUMBER (DOUBLE)**	**DEMAND_KEY of the work order specified in T_INTERNAL_DEMAND table.**	
DEMAND_KEY	**NUMBER (DOUBLE)**	**The demand_key of the SALES or FORECAST record, which will consume this work order. You can join this table to T_INTERNAL_DEMAND table on one side and V_DEMAND on the other side to get the complete details of the work.**	
PEGGED_QTY	**NUMBER (DOUBLE)**	**Quantity of the Component work order Pegegd to the final Customer or forecast Demand**	

T_PLANNED_PO TABLE:

The planned purchase orders generated by THRU-PUT/VPI. Every entry in the T_PLANNED_PO is pegged to multiple entries in the T_MATL_REQ table.

Column Name	Field Type	Description	Default value
PO_KEY	**NUMBER (DOUBLE)**	**Purchase order key. Found in the T_PLANNED_PO or PURCHASE table.**	
PART_ID	**TEXT (40)**	**Unique identifier for this part in The supply chain.**	
QTY	**NUMBER (DOUBLE)**	**PO quantity. The lot quantity**	
PO_REQ_DATE	**DATE/TIME**	**Date the PO is required.**	
BUYER_ACTION_DATE	**DATE/TIME**	**Date the buyer is expected to Take an action. PO_REQ_DATE - MRP_LEAD_TIME - DOCK_TO_STOCK_TIME - BUYER_LEAD_TIME.**	
MATL_REQ_DATE	**DATE/TIME**	**Date the Material is required.**	
LOCATION_ID	**TEXT (15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the Internal supply chain. Downloaded when data for more Than one plant are downloaded.**	

VENDOR_ID	TEXT (15)	The vendor in the SC_VENDOR_MASTER table For which this rule applies.	
VENDOR_LOCATION_ID	TEXT (15)	The specific plant for the vendor For whom this rule applies.	
ORDER_ID	TEXT (15)	Purchase Order ID.	
SALES_ORDER_ID	TEXT (15)	Indicates end Customer ORDER_ID. User can optionally download the end customer ORDER_ID in this field if the MO/PO is hard-pegged to a particular SALES order. Please note that when you do hard-peg a MO/PO, the part needs to be non-lotsized (no order modifiers/aggregation etc) so are it's parent items reaching until the final product for which there is a sales order.	

LOADP TABLE:

This table contains information of Work center and Forecasting information (how many units are going to release).

Column Name	Field Type	Description	Default value
WC_NUM	TEXT (15)	Work center Number.	
UNITS	NUMBER (DOUBLE)	The number of identical machines or resources in the work center defined in Workcenter_ID.	
BUCKET_START	DATE/TIME	Start date of bucket (Work is started for that slot)	
BUCKET_END	DATE/TIME	End date of bucket (Work is ended for that slot)	
BUCKET_LOAD	NUMBER (DOUBLE)	Total load on a work center.	
BUCKET_LABOR_LOAD	NUMBER (DOUBLE)	Total capacity of a work center to produce output.	

AVAIL_TIME	**NUMBER (DOUBLE)**	**Total load time on a work center to forecast units.**	
BUCKET_TYPE	**NUMBER (DOUBLE)**	**Type 0:** **1st bucket = past due bucket** **2nd – 10th bucket = daily buckets** **11th – 13th bucket = weekly buckets** **14th – 15th bucket = monthly buckets** **Type 1:** **1st bucket = past due bucket** **2nd – 7th bucket = weekly buckets** **8th – 15th bucket = monthly buckets**	
LOCATION_ID	**TEXT (15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the Internal supply chain. Downloaded when data for more** **Than one plant are downloaded.**	
WC_DESC	**TEXT (40)**	**A description of the work center defined in WORKCENTER_ID.**	

SUPPLY_DEMAND TABLE:

This table contains information of Work Load divided into Bucket Types and bucket types GRS, NET, FRM, PLN and POH from 0 to 14.

Column Name	Field Type	Description	Default value
TYPE_ID	**TEXT (15)**	**Type Id defines two type of summary for buckets:** **Type 0 - short summary** **Type 1 - Long Summary**	

PART_ID	**TEXT (40)**	**Unique identifier for this part in The supply chain.**	
PART_ON_HAND	**NUMBER (DOUBLE)**	**Total quantity of raw material is available in hand, for which the part is going to forecast.**	
LOCATION_ID	**TEXT (15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the Internal supply chain. Downloaded when data for more Than one plant are downloaded.**	
TOTAL_QOH	**NUMBER (DOUBLE)**	**Total quantity which is required for forecasting is available on Hand at work center. .**	
QOH_LOC	**TEXT (60)**	**Quantity on Hand is available at Location for producing required units.**	
BUCKET0_GRS	**NUMBER (DOUBLE)**	**Type 0: past due Gross Qty for bucket. Type 1: past due Gross Qty for bucket.**	
BUCKET0_NET	**NUMBER (DOUBLE)**	**Type 0: Past Due Net Qty for bucket. Type 1: Past Due Net Qty for bucket.**	
BUCKET0_FRM	**NUMBER (DOUBLE)**	**Type 0: Past due Firm Qty for bucket. Type 1: Past due Firm Qty for bucket.**	
BUCKET0_PLN	**NUMBER (DOUBLE)**	**Type 0: past due Planned Qty for bucket. Type 1: past due Planned Qty for bucket.**	
BUCKET0_POH	**NUMBER (DOUBLE)**	**Type 0: Past due Projected On Hand Qty for bucket. Type 1: Past due Projected On Hand Qty for bucket.**	
BUCKET1_GRS	**NUMBER (DOUBLE)**	**Type 0: Gross Qty for 1st daily bucket. Type 1: Gross Qty for 1st weekly bucket.**	

BUCKET1_NET	**NUMBER (DOUBLE)**	**Tyoe 0:** **Net Qty for 1st daily bucket.** **Type 1:** **Net Qty for 1st weekly bucket.**	
BUCKET1_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 1st daily bucket.** **Type 1:** **Firm Qty for 1st weekly bucket.**	
BUCKET1_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 1st daily bucket.** **Type 1:** **Planned Qty for 1st weekly bucket.**	
BUCKET1_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 1st daily bucket.** **Type 1:** **Projected On Hand Qty for 1st weekly bucket.**	
BUCKET2_GRS	**NUMBER (DOUBLE)**	**Tyoe 0:** **Gross Qty for 2nd daily bucket.** **Type 1:** **Gross Qty for 2nd weekly bucket.**	
BUCKET2_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 2nd daily bucket.** **Type 1:** **Net Qty for 2nd weekly bucket.**	
BUCKET2_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 2nd daily bucket.** **Type 1:** **Firm Qty for 2nd weekly bucket.**	
BUCKET2_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 2nd daily bucket.** **Type 1:** **Planned Qty for 2nd weekly bucket.**	

BUCKET2_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 2nd daily bucket.** **Type 1:** **Projected On Hand Qty for 2nd weekly bucket.**	
BUCKET3_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 3rd daily bucket.** **Type 1:** **Gross Qty for 3rd weekly bucket.**	
BUCKET3_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 3rd daily bucket.** **Type 1:** **Net Qty for 3rd weekly bucket.**	
BUCKET3_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 3rd daily bucket.** **Type 1:** **Firm Qty for 3rd weekly bucket.**	
BUCKET3_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 3rd daily bucket.** **Type 1:** **Planned Qty for 3rd weekly bucket.**	
BUCKET3_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 3rd daily bucket.** **Type 1:** **Projected On Hand Qty for 3rd weekly bucket.**	
BUCKET4_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 4th daily bucket.** **Type 1;** **Gross Qty for 4th weekly bucket.**	
BUCKET4_NET	**NUMBER (DOUBLE)**	**Type 1:** **Net Qty for 4th daily bucket.** **Type 1:** **Net Qty for 4th weekly bucket.**	
BUCKET4_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 4th daily bucket.** **Type 1:**	

		Firm Qty for 4th weekly bucket.	
BUCKET4_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 4th daily bucket.** **Type 1:** **Planned Qty for 4th weekly bucket.**	
BUCKET4_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 4th daily bucket.** **Type 1:** **Projected On Hand Qty for 4th weekly bucket.**	
BUCKET5_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 5th daily bucket.** **Type 1:** **Gross Qty for 5th weekly bucket.**	
BUCKET5_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 5th daily bucket.** **Type 1:** **Net Qty for 5th weekly bucket.**	
BUCKET5_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 5th daily bucket.** **Type 1:** **Firm Qty for 5th weekly bucket.**	
BUCKET5_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 5th daily bucket.** **Type 1:** **Planned Qty for 5th weekly bucket.**	
BUCKET5_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 5th daily bucket.** **Type 1:** **Projected On Hand Qty for 5th weekly bucket.**	
BUCKET6_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 6th daily bucket.** **Type 1:** **Gross Qty for 6th weekly bucket.**	

BUCKET6_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 6th daily bucket.** **Type 1:** **Net Qty for 6th weekly bucket.**	
BUCKET6_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 6th daily bucket.** **Type 1:** **Firm Qty for 6th weekly bucket.**	
BUCKET6_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 6th daily bucket.** **Type 1:** **Planned Qty for 6th weekly bucket.**	
BUCKET6_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 6th daily bucket.** **Type 1:** **Projected On Hand Qty for 6th weekly bucket.**	
BUCKET7_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 7th daily bucket.** **Type 1:** **Gross Qty for 7th monthly bucket.**	
BUCKET7_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 7th daily bucket.** **Type 1:** **Net Qty for 7th monthly bucket.**	
BUCKET7_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 7th daily bucket.** **Type 1:** **Firm Qty for 7th monthly bucket.**	
BUCKET7_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 7th daily bucket.** **Type 1:** **Planned Qty for 7th monthly bucket.**	

BUCKET7_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 7th daily bucket.** **Type 1:** **Projected On Hand Qty for 7th monthly bucket.**	
BUCKET8_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 8th daily bucket.** **Type 1:** **Gross Qty for 8th monthly bucket.**	
BUCKET8_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 8th daily bucket.** **Type 1:** **Net Qty for 8th monthly bucket.**	
BUCKET8_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 8th daily bucket.** **Type 1:** **Firm Qty for 8th monthly bucket.**	
BUCKET8_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 8th daily bucket.** **Type 1:** **Planned Qty for 8th monthly bucket.**	
BUCKET8_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 8th daily bucket.** **Type 1:** **Projected On Hand Qty for 8th monthly bucket.**	
BUCKET9_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 9th daily bucket.** **Type 1:** **Gross Qty for 9th monthly bucket.**	
BUCKET9_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 9th daily bucket.** **Type 1:** **Net Qty for 9th monthly bucket.**	

BUCKET9_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 9th daily bucket.** **Type 1:** **Firm Qty for 9th monthly bucket.**	
BUCKET9_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 9th daily bucket.** **Type 1:** **Planned Qty for 9th monthly bucket.**	
BUCKET9_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 9th daily bucket.** **Type 1:** **Projected On Hand Qty for 9th daily bucket.**	
BUCKET10_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 10th weekly bucket.** **Type 1:** **Gross Qty for 10th monthly bucket.**	
BUCKET10_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 10th weekly bucket.** **Type 1:** **Net Qty for 10th monthly bucket.**	
BUCKET10_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 10th weekly bucket.** **Type 1:** **Firm Qty for 10th monthly bucket.**	
BUCKET10_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 10th weekly bucket.**	

		Type 1: **Planned Qty for 10th monthly bucket.**	
BUCKET10_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 10th weekly bucket.** **Type 1:** **Projected On Hand Qty for 10th monthly bucket.**	
BUCKET11_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 11th weekly bucket.** **Type 1:** **Gross Qty for 11th monthly bucket.**	
BUCKET11_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 11th weekly bucket.** **Type 1:** **Net Qty for 11th monthly bucket.**	
BUCKET11_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 11th weekly bucket.** **Type 1:** **Firm Qty for 11th monthly bucket.**	
BUCKET11_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 11th weekly bucket.** **Type 1:** **Planned Qty for 11th monthly bucket.**	
BUCKET11_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 11th weekly bucket.** **Type 1:** **Projected On Hand Qty for 11th monthly bucket.**	
BUCKET12_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 12th weekly bucket.** **Type 1:** **Gross Qty for 12th monthly bucket.**	
BUCKET12_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 12th weekly bucket.** **Type 1:** **Net Qty for 12th monthly bucket.**	

BUCKET12_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 12th weekly bucket.** **Type 1:** **Firm Qty for 12th monthly bucket.**	
BUCKET12_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 12th weekly bucket.** **Type 1:** **Planned Qty for 12th monthly bucket.**	
BUCKET12_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 12th weekly bucket.** **Type 1:** **Projected On Hand Qty for 12th monthly bucket.**	
BUCKET13_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 13th monthly bucket.** **Type 1:** **Gross Qty for 13th monthly bucket.**	
BUCKET13_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 13th monthly bucket.** **Type 1:** **Net Qty for 13th monthly bucket.**	
BUCKET13_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 13th monthly bucket.** **Type 1:** **Firm Qty for 13th monthly bucket.**	
BUCKET13_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 13th monthly bucket.** **Type 1:** **Planned Qty for 13th monthly bucket.**	
BUCKET13_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 13th monthly bucket.** **Type 1:** **Projected On Hand Qty for 13th monthly bucket.**	

BUCKET14_GRS	**NUMBER (DOUBLE)**	**Type 0:** **Gross Qty for 14th monthly bucket.** **Type 1:** **Gross Qty for 14th monthly bucket.**	
BUCKET14_NET	**NUMBER (DOUBLE)**	**Type 0:** **Net Qty for 14th monthly bucket.** **Type 1:** **Net Qty for 14th monthly bucket.**	
BUCKET14_FRM	**NUMBER (DOUBLE)**	**Type 0:** **Firm Qty for 14th monthly bucket.** **Type 1:** **Firm Qty for 14th monthly bucket.**	
BUCKET14_PLN	**NUMBER (DOUBLE)**	**Type 0:** **Planned Qty for 14th monthly bucket.** **Type 1:** **Planned Qty for 14th monthly bucket.**	
BUCKET14_POH	**NUMBER (DOUBLE)**	**Type 0:** **Projected On Hand Qty for 14th monthly bucket.** **Type 1:** **Projected On Hand Qty for 14th monthly bucket.**	

SUPPLY_DEMAND_COLS TABLE:

This Table Contains Information of Headers for Bucket Types, and headers from 0 to 14 to capture daily, weekly and Monthly buckets.

Column Name	Field Type	Description	Default value
TYPE_ID	**TEXT (15)**	**Type 0: Short summary**	

		Type 1: Long summary	
HEADER0	**TEXT (20)**	**Type 0:** **Past due Date information for bucket.** **Type 1:** **Past due Date information for bucket .**	
HEADER1	**TEXT (20)**	**Type 0:** **Date information for 1st daily bucket.** **Type 1:** **Date information for 1st weekly bucket.**	
HEADER2	**TEXT (20)**	**Type 0:** **Date information for 2nd daily bucket.** **Type 1:** **Date information for 2nd weekly bucket.**	
HEADER3	**TEXT (20)**	**Type 0:** **Date information for 3rd daily bucket.** **Type 1:** **Date information for 3rd weekly bucket.**	
HEADER4	**TEXT (20)**	**Type 0:** **Date information for 4th daily bucket.** **Type 1:** **Date information for 4th weekly bucket.**	
HEADER5	**TEXT (20)**	**Type 0:** **Date information for 5th daily bucket.** **Type 1:** **Date information for 5th weekly bucket.**	
HEADER6	**TEXT (20)**	**Type 0:** **Date information for 6th daily bucket.**	

		Type 1: **Date information for 6th weekly bucket.**	
HEADER7	**TEXT (20)**	**Type 0:** **Date information for 7th daily bucket.** **Type 1:** **Date information for 7th monthly bucket.**	
HEADER8	**TEXT (20)**	**Type 0:** **Date information for 8th daily bucket.** **Type 1:** **Date information for 8th monthly bucket.**	
HEADER9	**TEXT (20)**	**Type 0:** **Date information for 9th daily bucket.** **Type 1:** **Date information for 9th monthly bucket.**	
HEADER10	**TEXT (20)**	**Type 0:** **Date information for 10th weekly bucket.** **Type 1:** **Date information for 10th monthly bucket.**	
HEADER11	**TEXT (20)**	**Type 0:** **Date information for 1[1th] weekly bucket.** **Type 1:** **Date information for 11th monthly bucket.**	
HEADER12	**TEXT (20)**	**Type 0:** **Date information for 12[1th] weekly bucket.** **Type 1:** **Date information for 12th monthly bucket.**	
HEADER13	**TEXT (20)**	**Type 0:** **Date information for 13[3th] monthly bucket.** **Type 1:**	

		Date information for 13th monthly bucket.	
HEADER14	**TEXT (20)**	**Type 0:** **Date information for 14th monthly bucket.** **Type 1:** **Date information for 14th monthly bucket.**	

T_PLANNED_WOS TABLE:

Column Name	Field Type	Description	Default value
RES_WORKORDER_ID	**TEXT (25)**	**Released Work order ID.**	
PART_ID	**TEXT (40)**	**Unique identifier for this part in** **The supply chain.**	
QTY	**NUMBER (DOUBLE)**	**Pieces.**	
ROUTE_ID	**TEXT (15)**	The route to which this operation belongs. THRU-PUT/VPI uses the Primary_Route_ID from the Part Master file, if specified, to generate *additional material releases.*	
LOCATION_ID	**TEXT (15)**	**Plant ID when you installed THRU-PUT/VPI. Unique value across the Internal supply chain.** **Downloaded when data for more** **Than one plant are downloaded.**	
CAN_RELEASE	**NUMBER (DOUBLE)**		
CAN_RELEASE_QTY	**NUMBER (DOUBLE)**		
SALES_ORDER_ID	**TEXT (15)**		

T_REPLENISH_DEMAND TABLE – Not applicable to VPi and applies to Thru-Put/VPi only

This table gets populated only when you use Kanban planning for one or more items. This table contains all true demands for the replenish parts without taking into consideration the min max values of the replenish parts. This table structure is same as T_INTERNAL_DEMAND table.

Column descriptions

Column Name	Field Type	Description	Default value
*DEMAND_KEY	NUMBER (DOUBLE)	An internal key generated by the software to identify this work order uniquely. This is sometimes referred to as internal_demand_key.	
PART_ID	TEXT(40)	KanBan Part or KanBan Item Number	
WORKORDER_ID	TEXT (15)	Work order ID for the Kanban item.	
START_DATE	DATE	Release date or start date of the work order	
START_TIME	NUMBER (INTEGER)	Start time in Seconds. If using shift calendar, then represent the actual time of the day in seconds.	
DUE_DATE	DATE	End date or the due date of the work order	
DUE_TIME	NUMBER	End time of the work order in Seconds. If using shift calendar, then represent the actual time of the day in seconds.	
QTY	NUMBER (DOUBLE)	Work order Quantity (Open Quantity)	
PO_SEQ	NUMBER (DOUBLE)	Demand Key of the parent supply where the KaanBan work order is consumed or pegged. Can be drum supply, internal demand or an independent demand	