
Anatomy of SAP Statuses History For Routine Maintenance



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Foundation machinery to utilizing Status History

SAP transaction: ZPM_WO_HISTORY

Take same route with respect to notifications

Join the status history to the detail of the notifications through SAP IW29: List of notifications (Done with MS Access query functionality)

1	Notification
2	Order
3	Description
4	User status
5	System status
6	Cost center
7	Planner group
8	FuncLocation
9	Created on
10	Changed on
11	Description2
12	Main WorkCtr
13	Notif.date
14	Notifictn type
15	Priority

Export to Excel Table

Who activated the status

Note:

- Can also join the outcomes of Orders and notifications in a single table.
- The output is Excel Pivots sitting on top of the joined tables.

Excel and Table functionality

Join the status history to the detail of the orders available through SAP IW39: List of orders (Done with MS Access query functionality)

1	Order
2	Order type
3	Short text
4	Priority
5	Priority text
6	Resp. cost cntr
7	MaintActivType
8	User status
9	System status
10	Entered by
11	Planner group
12	Cost center
13	FuncLocation
14	Total plan cost
15	Total act.costs
16	Asset
17	Work center
18	Created on
19	Actual release
20	ReferenceDate
21	Bas. start date
22	Basic fin. date
23	Sched. start
24	Sched. finish
25	Actual start
26	Main WorkCtr
27	Notification
28	Equipment
29	

Insights to ZPM_WO_HISTORY - Transaction for work order status report

Can select a single status; otherwise all statuses will be generated

If processing a large number of orders may be best to run transaction for user and system statuses separately, and append one to the other in Excel. This is because there may be so many records that SAP will not export. This is especially so for System Status

Reference date is linked to the date of the status rather than the reference dates appearing in SAP transactions such as IW39, IW29, IW47 or IW49.

Upper limit of orders and notifications appears to be 5,000

The transaction works best by extracting a list of orders and notifications of interest from another source (i.e., IW39, IW29, IW47 or IW49) and generating statuses upon them.

Explanation of Statuses

Work orders statuses

Status Type	Status	Status Description
User Status	CANC	Cancelled
User Status	FS	Simple fix
User Status	MCMP	Maintenance Complete
User Status	MOC	Management of Change
User Status	TCMP	Technically Complete
User Status	WAPP	Work Order Approved
User Status	WENG	Waiting on Engineering
User Status	WMAT	Waiting on Material
User Status	WOHD	Work Order on Hold
User Status	WOIP	Work Order in Progress
User Status	WOPR	Waiting on Operations
User Status	WRTA	Ready to Approve
System Status	AVAC	Availability control active
System Status	CLSD	Closed
System Status	CRTD	Created
System Status	CSER	Error in cost calculation
System Status	DLFL	Deletion flag
System Status	DSEX	Date set by external system
System Status	DSPT	Dispatched
System Status	ESTC	Estimated costs
System Status	GMPS	Goods movement posted
System Status	MACM	Material committed
System Status	MANC	Mat.availability not checked
System Status	MSPT	Material shortage
System Status	NCMP	Not completed
System Status	NMAT	No material components
System Status	NTUP	Dates are not updated
System Status	PCNF	Partially confirmed
System Status	PPRT	Part printed
System Status	PRC	Pre-costed
System Status	PRT	Printed
System Status	REL	Released
System Status	RELR	Release rejected
System Status	SETC	Settlement rule created
System Status	SSAP	Object created
System Status	TECO	Technically completed



→ = Mainstream statuses



Hold status



Hold statuses



Hold status



Infrequent



Occurs when taking into Primavera

Hold status



Appeared 82 time for a subject 593 MX04 orders.

Note:

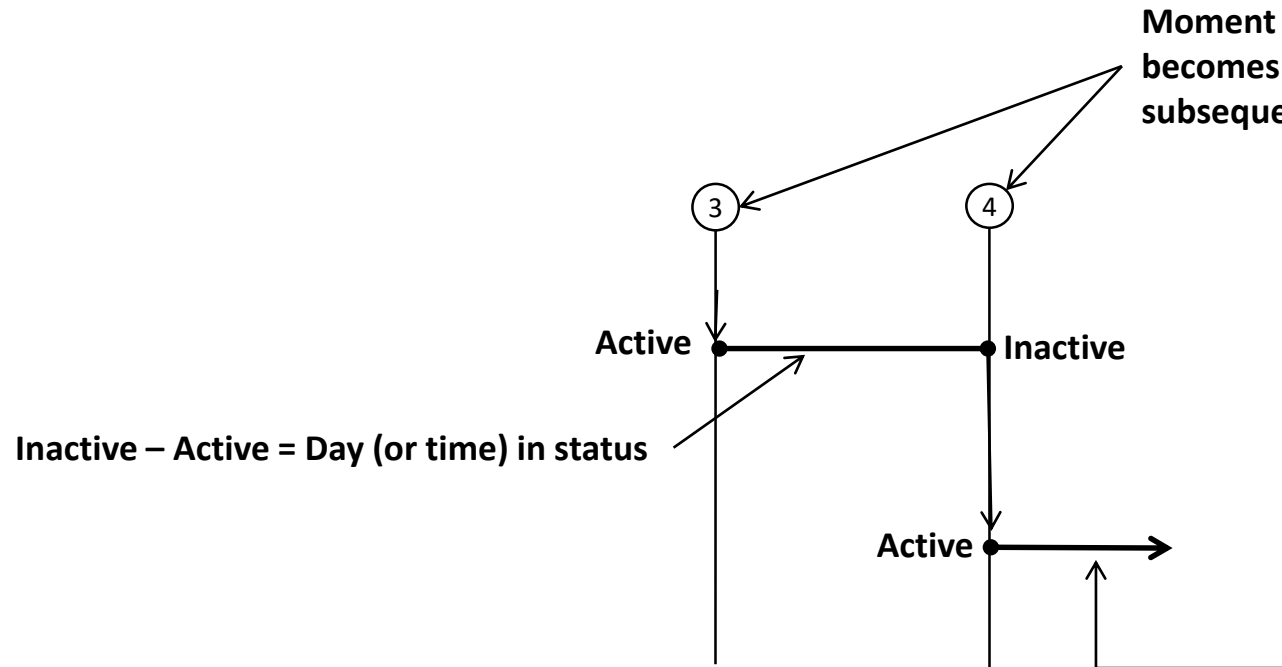
- All shown statuses appeared at least once in 593 subject MX04 orders.
- Which of the non-mainstream statuses should be more deeply explored and for what reason?

Notification statuses

Status Type	Status	Status Description
User Status	DU	Duplicate Request
User Status	II	Insufficient Information
User Status	NAPR	Notification Approved
User Status	NAWA	Notification Awaiting Approval
User Status	NCAN	Notification Canceled
User Status	NN	Not necessary after Discussion
User Status	O AFC	Oper. Approved for Completion
User Status	R04	RAM Score = 4
User Status	R05	RAM Score = 5
User Status	R06	RAM Score = 6
User Status	R07	RAM Score = 7
User Status	R08	RAM Score = 8
User Status	R09	RAM Score = 9
User Status	R10	RAM Score = 10
User Status	R11	RAM Score = 11
User Status	R12	RAM Score = 12
User Status	R13	RAM Score = 13
User Status	R14	RAM Score = 14
User Status	R15	RAM Score = 15
User Status	R16	RAM Score = 16
User Status	R17	RAM Score = 17
User Status	R18	RAM Score = 18
User Status	R19	RAM Score = 19
User Status	R20	RAM Score = 20
User Status	R21	RAM Score = 21
User Status	R22	RAM Score = 22
User Status	SEP	Self Execution Preferred
User Status	TWAP	TA Awaiting Approval
System Status	DLFL	Deletion flag
System Status	NOCO	Notification completed
System Status	NOPR	Notification in process
System Status	NOPT	Notification printed
System Status	ORAS	Order assigned
System Status	OSNO	Outstanding notification



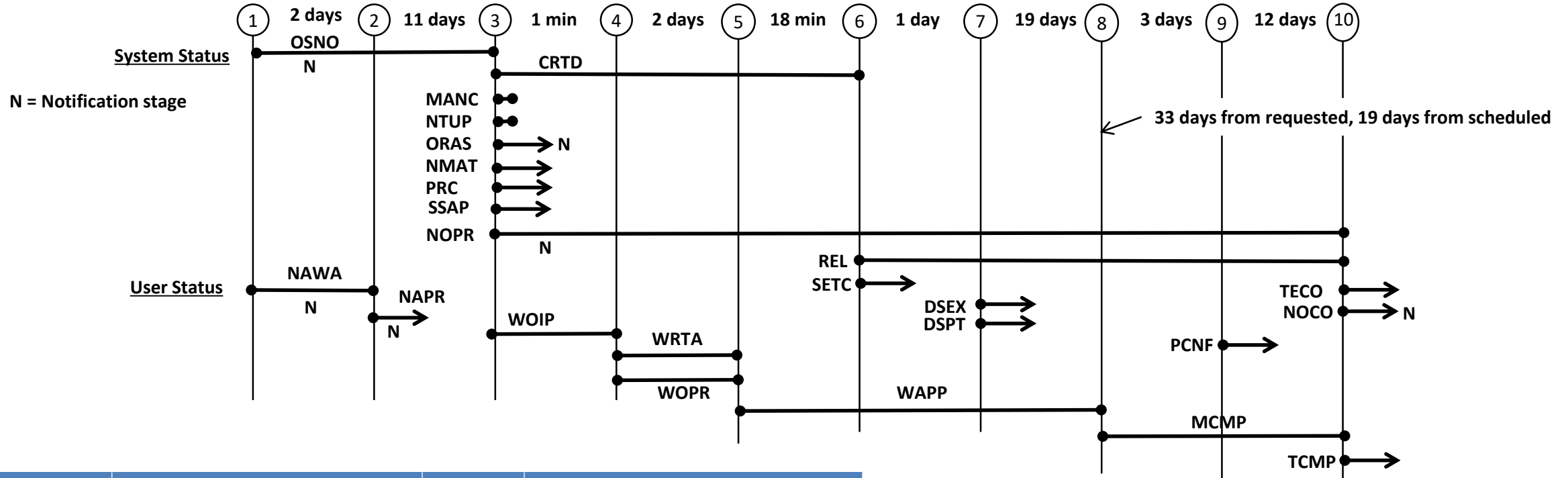
Schematic of status for insight



User and system statuses are parallel streams rather than swim-lane-like. The stream with richest intelligence is User Status. It has key cross relation points to System Status and, thus, can be a proxy to System Status.

- The order or notification is in a status for which the Active state only is the case.
- This is also the case for a snapshot of current backlog and the orders is in the status at that point in time.
- Some statuses remain in Active, never going to Inactive, unless something abnormal is happening such as rework or new charges.
- Examples of permanent Inactive include ORAS, NOCO and NAPR. For TECO and TCMP, statuses remain Inactive except in the relatively few times CLSD is becomes Active.

MX03 and MX04 Orders: Progression of stages, statuses and states



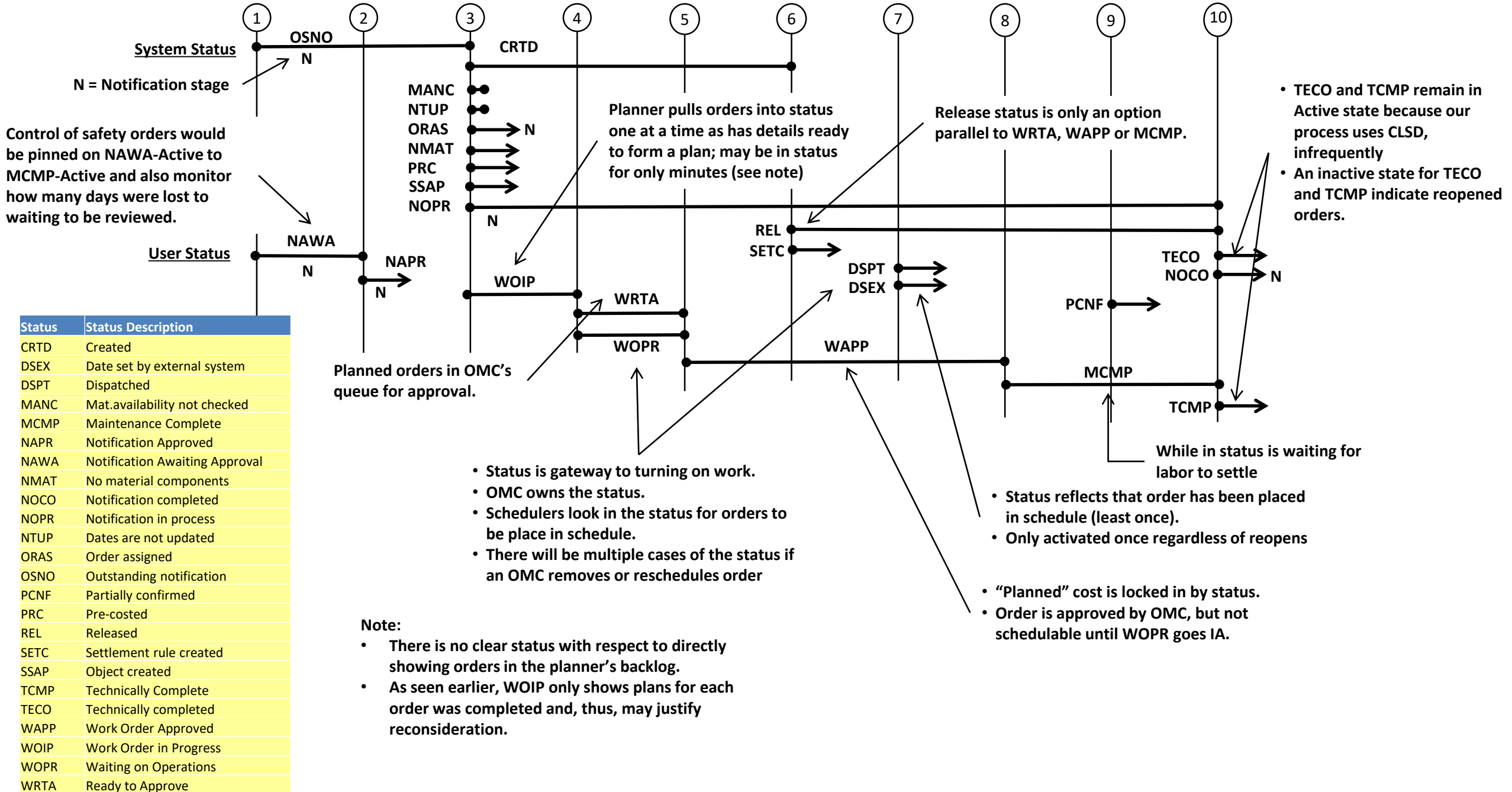
Order	Short text	User status	System status
6001091424	IM-HTU4-3PI6043-HTR1 DRAFT PRESS	TCMP	TECO PCNF DSEX DSPT NMAT PRC SETC

StatType	Status	Status Description	State	Time	Name	Date	HistoryType	
System	OSNO	Outstanding notification	Active	7:50:54	USCLY4	12/18/2012	Notification	1
User	NAWA	Notification Awaiting Approval	Active	7:50:54	USCLY4	12/18/2012	Notification	
User	NAPR	Notification Approved	Active	5:47:15	USSMO5	12/20/2012	Notification	2
User	NAWA	Notification Awaiting Approval	Inactive	5:47:15	USSMO5	12/20/2012	Notification	
System	CRTD	Created	Active	12:59:29	WHATLHK	12/31/2012	Order	
System	MANC	Mat.availability not checked	Active	12:59:29	WHATLHK	12/31/2012	Order	
System	NMAT	No material components	Active	12:59:29	WHATLHK	12/31/2012	Order	
System	NTUP	Dates are not updated	Active	12:59:29	WHATLHK	12/31/2012	Order	
System	PRC	Pre-casted	Active	12:59:29	WHATLHK	12/31/2012	Order	
System	SSAP	Object created	Active	12:59:29	WHATLHK	12/31/2012	Order	3
System	NOPR	Notification in process	Active	12:59:29	WHATLHK	12/31/2012	Notification	
System	ORAS	Order assigned	Active	12:59:29	WHATLHK	12/31/2012	Notification	
User	WOIP	Work Order in Progress	Active	12:59:29	WHATLHK	12/31/2012	Order	
System	MANC	Mat.availability not checked	Inactive	12:59:29	WHATLHK	12/31/2012	Order	
System	NTUP	Dates are not updated	Inactive	12:59:29	WHATLHK	12/31/2012	Order	
System	OSNO	Outstanding notification	Inactive	12:59:29	WHATLHK	12/31/2012	Notification	
User	WOPR	Waiting on Operations	Active	13:00:22	WHATLHK	12/31/2012	Order	4
User	WRTA	Ready to Approve	Active	13:00:22	WHATLHK	12/31/2012	Order	
User	WOIP	Work Order in Progress	Inactive	13:00:22	WHATLHK	12/31/2012	Order	

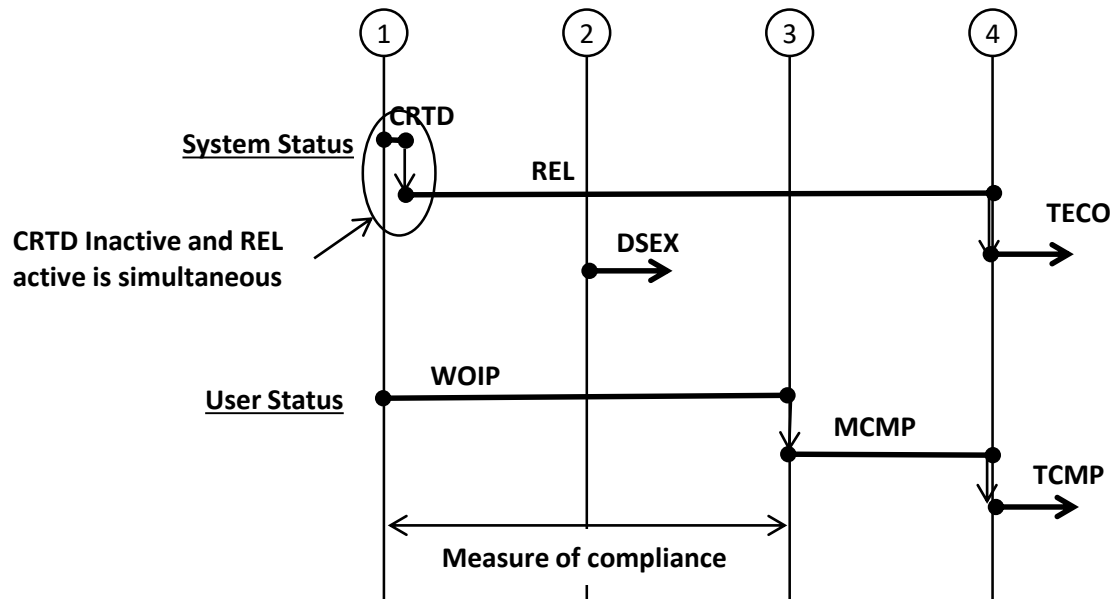
StatType	Status	Status Description	State	Time	Name	Date	History	
User	WAPP	Work Order Approved	Active	6:34:08	USSMO5	1/2/2013	Order	
User	WOPR	Waiting on Operations	Inactive	6:34:08	USSMO5	1/2/2013	Order	5
User	WRTA	Ready to Approve	Inactive	6:34:08	USSMO5	1/2/2013	Order	
System	REL	Released	Active	6:51:35	KIRBYMW	1/2/2013	Order	
System	SETC	Settlement rule created	Active	6:51:35	KIRBYMW	1/2/2013	Order	6
System	CRTD	Created	Inactive	6:51:35	KIRBYMW	1/2/2013	Order	
System	DSEX	Date set by external system	Active	2:15:04	RFC:PRIM	1/3/2013	Order	
System	DSPT	Dispatched	Active	2:15:04	RFC:PRIM	1/3/2013	Order	7
User	MCMP	Maintenance Complete	Active	10:34:42	USSCPE	1/22/2013	Order	
User	WAPP	Work Order Approved	Inactive	10:34:42	USSCPE	1/22/2013	Order	8
System	PCNF	Partially confirmed	Active	19:33:35	PRD_MOP	1/25/2013	Order	9
System	TECO	Technically completed	Active	15:30:08	USSMO5	2/6/2013	Order	
System	NOCO	Notification completed	Active	15:30:08	USSMO5	2/6/2013	Notification	
User	TCMP	Technically Complete	Active	15:30:08	USSMO5	2/6/2013	Order	10
System	REL	Released	Inactive	15:30:08	USSMO5	2/6/2013	Order	
System	NOPR	Notification in process	Inactive	15:30:08	USSMO5	2/6/2013	Notification	
User	MCMP	Maintenance Complete	Inactive	15:30:08	USSMO5	2/6/2013	Order	

StatusAnatomy.pptx

MX03 and MX04 Orders: Notes on the progression



MX01 and MX02 (Preventive) Orders: Progression of statuses and states

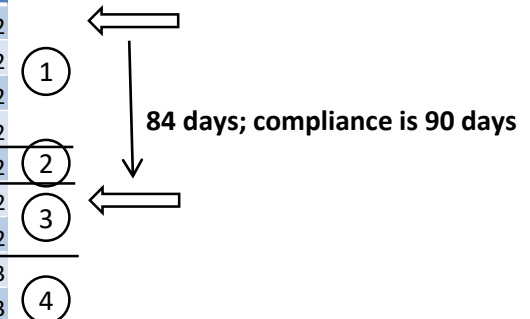


By keying off of WOIP as measure of compliance, we can:

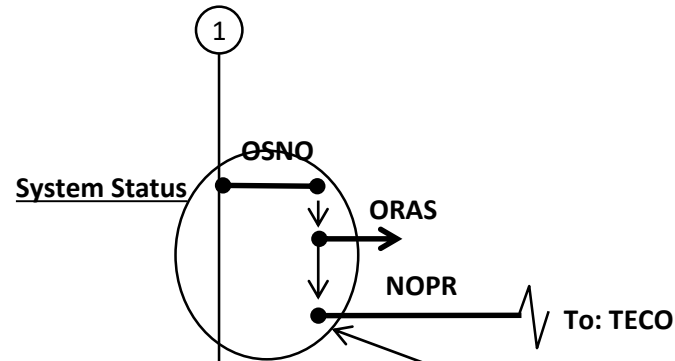
- See all PMs with respect to the week they are to go on the weekly schedule over the next 90 days.
- Smooth the PM workload over the visible 90 day period.
- Monitor each Monday for any orders that are late and take immediate action.

7970-ASTU-PH/ORP AT4453 ANALYZER PM

Order/Noti	Status Type	Status	Status Description	Active/In	Time	Name	Date
6001052093	User Status	WOIP	Work Order in Progress	Active	2:32:28	PRD_EQPS	8/27/2012
6001052093	System Status	CRTD	Created	Active	2:32:28	PRD_EQPS	8/27/2012
6001052093	System Status	REL	Released	Active	2:32:28	PRD_EQPS	8/27/2012
6001052093	System Status	CRTD	Created	Inactive	2:32:28	PRD_EQPS	8/27/2012
6001052093	System Status	DSEX	Date set by external system	Active	0:37:21	RFC:PRIMA	8/29/2012
6001052093	User Status	MCMP	Maintenance Complete	Active	7:41:26	USSMEK	11/19/2012
6001052093	User Status	WOIP	Work Order in Progress	Inactive	7:41:26	USSMEK	11/19/2012
6001052093	User Status	TCMP	Technically Complete	Active	12:20:50	USSMEK	2/5/2013
6001052093	System Status	TECO	Technically completed	Active	12:20:50	USSMEK	2/5/2013
6001052093	User Status	MCMP	Maintenance Complete	Inactive	12:20:50	USSMEK	2/5/2013
6001052093	System Status	REL	Released	Inactive	12:20:50	USSMEK	2/5/2013



MX02 (Preventive) Notification: Progression of stages, statuses and states



Note:

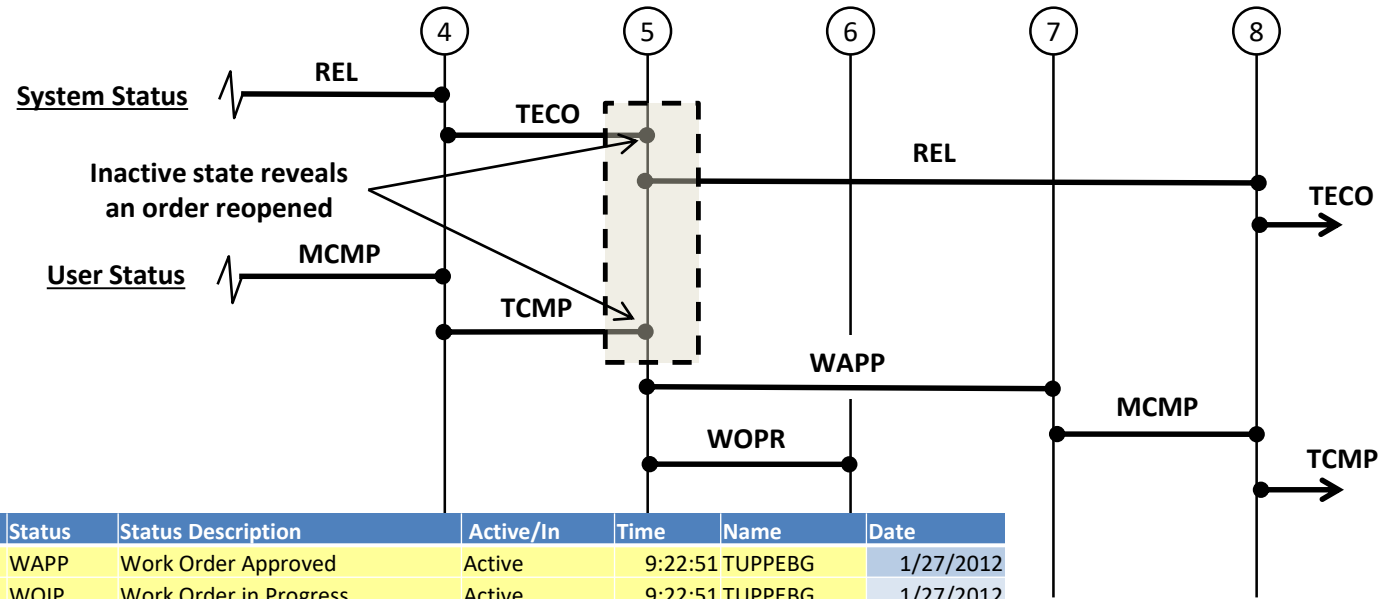
- Only MX02 passes through notification before entering the order process of statuses.
- The subsequent sequence for order statuses is the same for MX01 and MX02.

Notification process is all system status, thus, automated.

The automated process occurs within a nanosecond. Thus, use WOIP date as the measure of compliance for MX01 and MX02.

Order/Noti	Status Type	Stat	Status Description	Active/In	Time	Name	Date
6000951305	MX02	7970-TGT1-FNEXF001B PM INSPECTION					
100570627	System Status	NOPR	Notification in process	Active	2:39:38	PRD_EQPS	10/10/2011
100570627	System Status	ORAS	Order assigned	Active	2:39:38	PRD_EQPS	10/10/2011
100570627	System Status	OSNO	Outstanding notification	Active	2:39:38	PRD_EQPS	10/10/2011
100570627	System Status	OSNO	Outstanding notification	Inactive	2:39:38	PRD_EQPS	10/10/2011

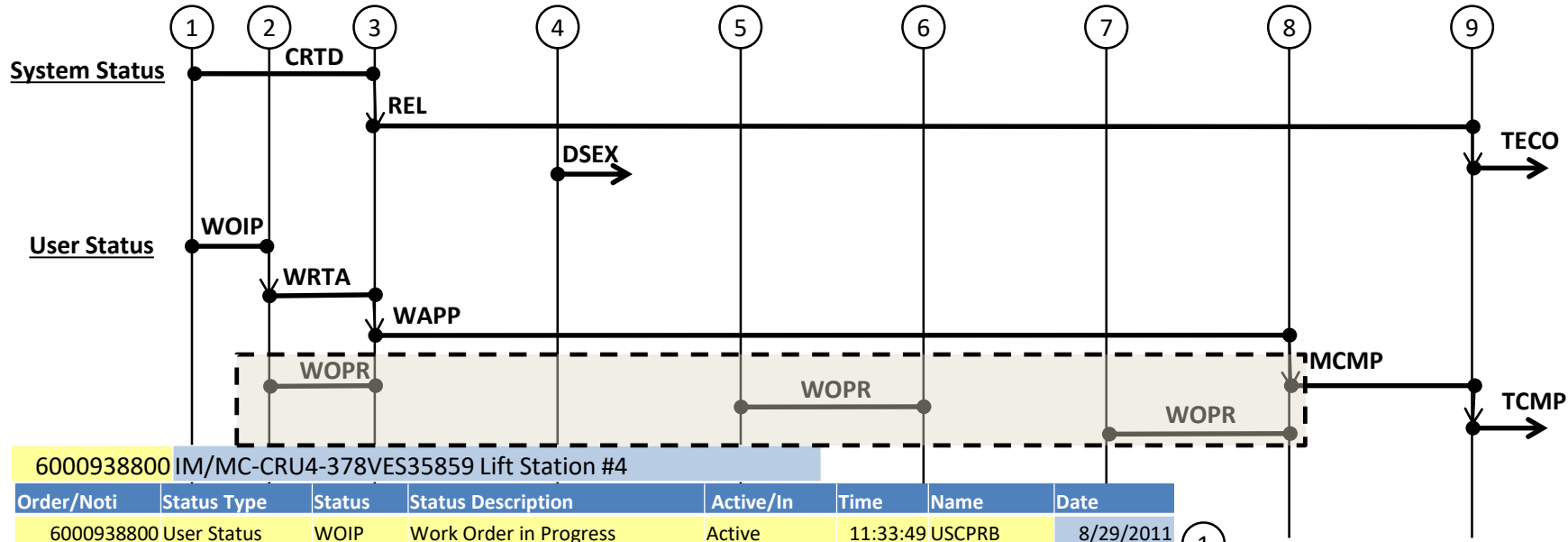
Case: An order reopened



Order/Noti	Status Type	Status	Status Description	Active/In	Time	Name	Date
6000983470	User Status	WAPP	Work Order Approved	Active	9:22:51	TUPPEBG	1/27/2012
6000983470	User Status	WOIP	Work Order in Progress	Active	9:22:51	TUPPEBG	1/27/2012
6000983470	System Status	CRTD	Created	Active	9:22:51	TUPPEBG	1/27/2012
6000983470	System Status	REL	Released	Active	9:22:51	TUPPEBG	1/27/2012
6000983470	User Status	WOIP	Work Order in Progress	Inactive	9:22:51	TUPPEBG	1/27/2012
6000983470	System Status	CRTD	Created	Inactive	9:22:51	TUPPEBG	1/27/2012
6000983470	System Status	DSEX	Date set by external system	Active	23:16:04	RFC:PRIMA	1/30/2012
6000983470	User Status	MCMP	Maintenance Complete	Active	8:41:23	JEFFERW	2/11/2012
6000983470	User Status	WAPP	Work Order Approved	Inactive	8:41:23	JEFFERW	2/11/2012
6000983470	User Status	TCMP	Technically Complete	Active	13:35:13	TPHOWAR	2/25/2012
6000983470	System Status	TECO	Technically completed	Active	13:35:13	TPHOWAR	2/25/2012
6000983470	User Status	MCMP	Maintenance Complete	Inactive	13:35:13	TPHOWAR	2/25/2012
6000983470	System Status	REL	Released	Inactive	13:35:13	TPHOWAR	2/25/2012
6000983470	User Status	WAPP	Work Order Approved	Active	11:50:04	HANLIBA	3/12/2012
6000983470	User Status	WOPR	Waiting on Operations	Active	11:50:04	HANLIBA	3/12/2012
6000983470	System Status	REL	Released	Active	11:50:04	HANLIBA	3/12/2012
6000983470	User Status	TCMP	Technically Complete	Inactive	11:50:04	HANLIBA	3/12/2012
6000983470	System Status	TECO	Technically completed	Inactive	11:50:04	HANLIBA	3/12/2012
6000983470	User Status	WOPR	Waiting on Operations	Inactive	13:04:45	HALLJP1	12/17/2012
6000983470	User Status	MCMP	Maintenance Complete	Active	6:00:00	USFGI2	1/14/2013
6000983470	User Status	WAPP	Work Order Approved	Inactive	6:00:00	USFGI2	1/14/2013
6000983470	User Status	TCMP	Technically Complete	Active	12:21:40	USSMEK	2/5/2013
6000983470	System Status	TECO	Technically completed	Active	12:21:40	USSMEK	2/5/2013
6000983470	User Status	MCMP	Maintenance Complete	Inactive	12:21:40	USSMEK	2/5/2013
6000983470	System Status	REL	Released	Inactive	12:21:40	USSMEK	2/5/2013

- Spot reopened orders with a query that reveals orders with TCMP Inactive one or more time.
- Note that DSEX which is activated to reflect the date set by Primavera can only occur once; which triggered at point "2." Accordingly, the status does not appear as an indicator of when the reopened order is scheduled.

Case: Order rescheduled



6000938800 IM/MC-CRU4-378VES35859 Lift Station #4

Order/Noti	Status Type	Status	Status Description	Active/In	Time	Name	Date
6000938800	User Status	WOIP	Work Order in Progress	Active	11:33:49	USCPRB	8/29/2011
6000938800	System Status	CRTD	Created	Active	11:33:49	USCPRB	8/29/2011
6000938800	User Status	WOIP	Work Order in Progress	Inactive	15:48:06	USCPRB	9/29/2011
6000938800	User Status	WOPR	Waiting on Operations	Active	15:48:06	USCPRB	9/29/2011
6000938800	User Status	WRTA	Ready to Approve	Active	15:48:06	USCPRB	9/29/2011
6000938800	User Status	WAPP	Work Order Approved	Active	6:54:04	TCDAIGL	10/3/2011
6000938800	User Status	WRTA	Ready to Approve	Inactive	6:54:04	TCDAIGL	10/3/2011
6000938800	System Status	CRTD	Created	Inactive	6:54:04	TCDAIGL	10/3/2011
6000938800	System Status	REL	Released	Active	6:54:04	TCDAIGL	10/3/2011
6000938800	User Status	WOPR	Waiting on Operations	Inactive	16:38:30	WINTEDA	10/3/2011
6000938800	System Status	DSEX	Date set by external system	Active	0:10:29	RFC:PRIMA	10/5/2011
6000938800	User Status	WOPR	Waiting on Operations	Active	5:17:14	TCDAIGL	10/19/2011
6000938800	User Status	WOPR	Waiting on Operations	Inactive	10:31:53	TUPPEBG	11/1/2011
6000938800	User Status	WOPR	Waiting on Operations	Active	15:44:58	HARPEMW	5/17/2012
6000938800	User Status	MCMP	Maintenance Complete	Active	15:52:10	LYNNJK	1/30/2013
6000938800	User Status	WAPP	Work Order Approved	Inactive	15:52:10	LYNNJK	1/30/2013
6000938800	User Status	WOPR	Waiting on Operations	Inactive	15:52:10	LYNNJK	1/30/2013
6000938800	User Status	MCMP	Maintenance Complete	Inactive	15:48:46	USRSL4	2/18/2013
6000938800	User Status	TCMP	Technically Complete	Active	15:48:46	USRSL4	2/18/2013
6000938800	System Status	REL	Released	Inactive	15:48:46	USRSL4	2/18/2013
6000938800	System Status	TECO	Technically completed	Active	15:48:46	USRSL4	2/18/2013

- Spot rescheduled orders with a query that reveals orders with WOPR Active greater than once.
- Note that DSEX which is activated to reflect the date set by Primavera can only occur once; which triggered at point "4." Accordingly, the status does not appear as an indicator of when the reopened order is scheduled.