



M3 Job Management

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**Job management
“news”**

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FAQ/Best practise

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Questions

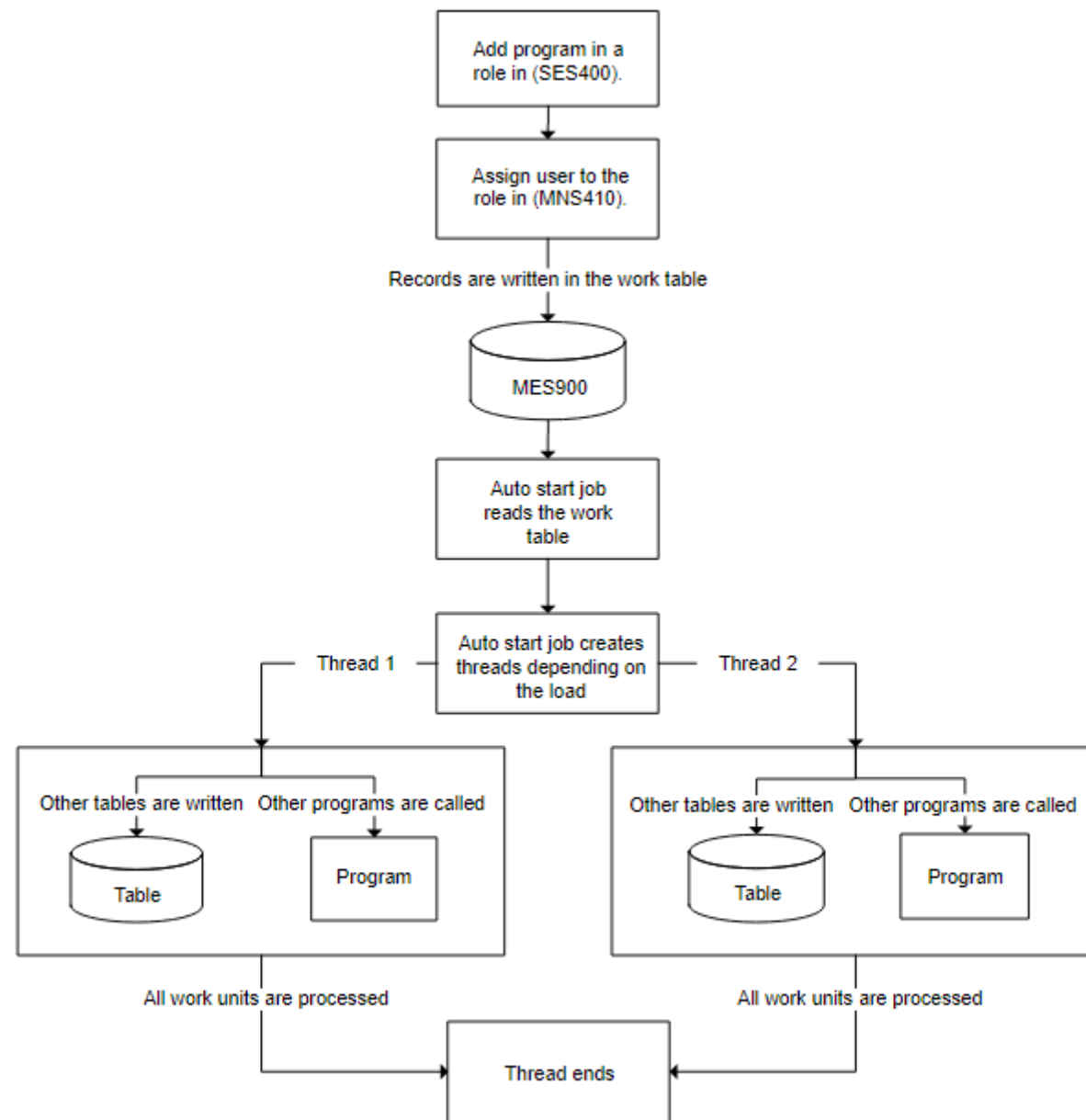
Job Management

M3 Job Management - Introduction

M3 Job Management – Auto job introduction

- CMONASJ
 - Auto job CMONASJ controls all other auto jobs i.e. starts them, ends them etc.
- Auto jobs with queue table
 - Auto jobs with queue tables ends after 15 min idle time and starts up as soon as something is added to the queue.
- Auto jobs without queue table
 - Restarted every 24 h (for the moment)
- IMQ (in memory queue) auto jobs
 - Consists of one producer and up to 5 consumers (for the moment) = 5 parallel threads
 - Scalable i.e. consumers varies depending on load
 - Set up in MNS051
 - Parallel instances of auto job is not allowed if running IMQ

M3 Job Management – IMQ introduction



MNS051 Subsystem Job. Open

Actions ▾ Options ▾ Related ▾ Tools ▾

Subsystem Auto start job definition
 Job

Details

Description
 Status Run mode
 Program
 Delay
 Table Manage Permissions 1

Overriding Data

Company
 Division
 System language
 User

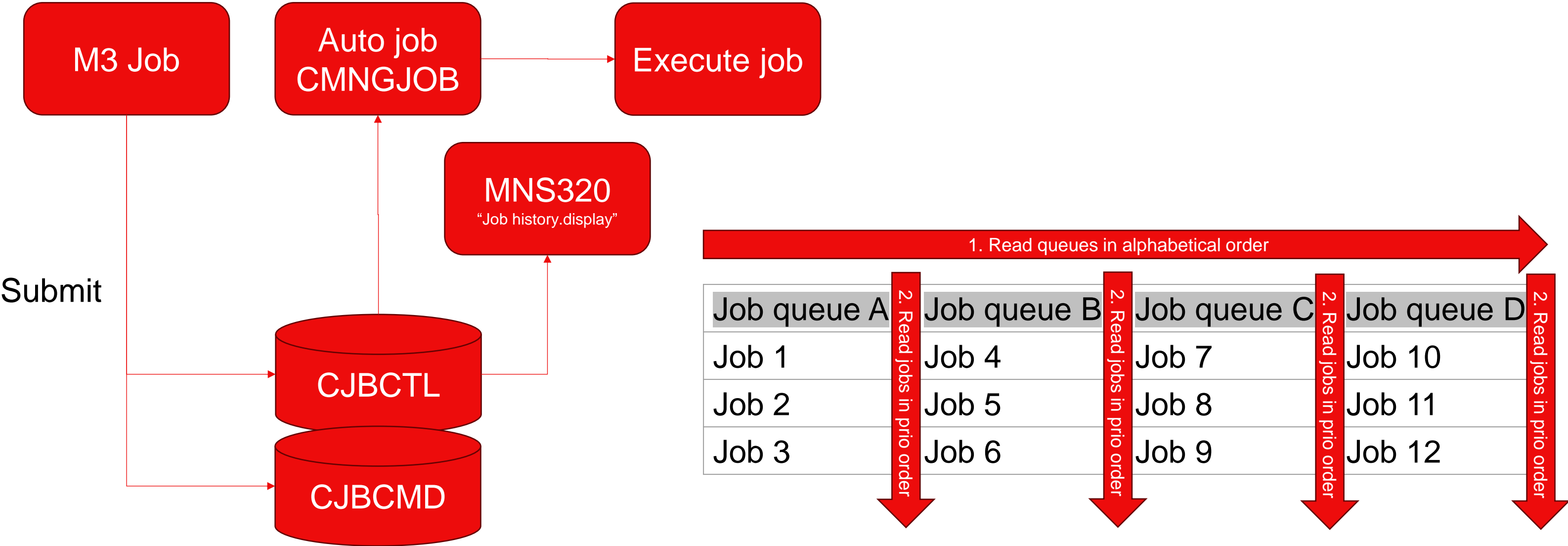
In-Memory Queue

IMQ program
 Max queue size Max nbr consum

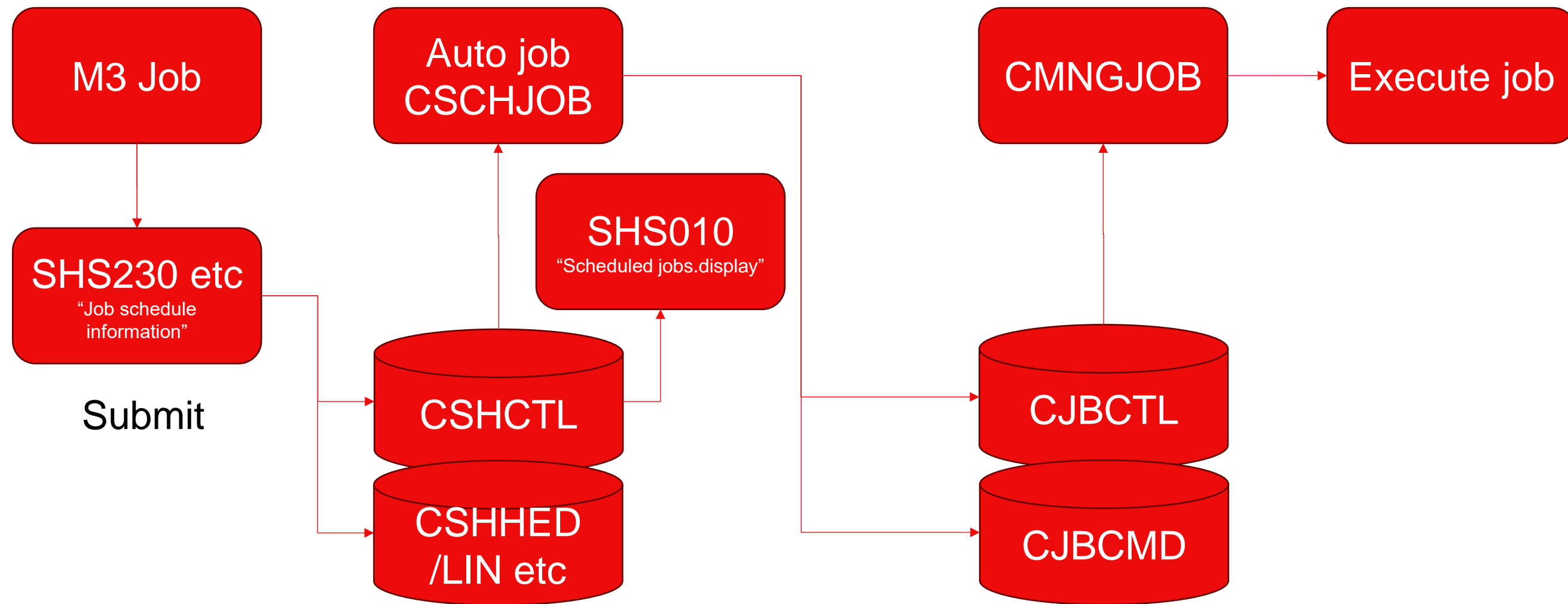
M3 Job Management – Batch job introduction

- How are the submitted jobs executed?
 - Auto job CMNGJOB manages all submitted jobs
- But if a job is scheduled?
 - Auto job CSCHJOB manages all scheduled jobs and submits them for CMNGJOB to execute
- In which order are my jobs executed?
 - Jobs are handled in the following order:
 - Job queue name (alphabetical order)
 - Job priority within a job queue
 - When max jobs reached, go to next job queue
- Where can I see my jobs?
 - Monitoring can be done in MNS320 'Job.display history'

M3 Job Management – Normal submit



M3 Job Management – Job schedule submit



M3 Job Management

M3 Job Management - “News”

What we've done – MNS300 Job queue

- Status
 - Possible to deactivate a job queue
 - Jobs can still be submitted to an inactive job queue
 - Could be used if you don't want CMNGJOB to pick any more jobs from that job queue

The screenshot displays the configuration page for an MNS300 Job Queue. The top navigation bar is green and contains the text 'MNS300 Job Queue. Open'. Below this, there is a secondary green bar with menu items: 'Actions', 'Options', 'Related', and 'Tools', followed by several icons. The main content area is white and contains the following fields:

- Job queue:** A text field containing the value 'ARCHIVING'.
- Description:** A text field containing the value 'Archiving queue'.
- Details:**
 - Max active jobs:** A text field containing the value '10'.
 - Status:** A dropdown menu with three options: '20-Active' (highlighted in blue), '20-Active', and '90-Deactivated'.

What we've done – MNS320 Job display

- New statuses
 - 10 = On-hold
 - 90 = Cancelled
 - F17 = MNS321 Mass update

☰
MNS320 Job. Display History

Actions ▾ Options ▾ Related ▾ Tools ▾
+ ✖ ↗ ↻ 🗑️ 🔄 📄
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Status -

Job name

Changed by

Sort

Chg dt	Status	Changed by	Job number	Job queue prty	Ent dt	Ent tm	Job queue	Chg tm	Job name
<input type="text"/>			<input type="text"/>		<input type="text"/>	<input type="text"/>			
230731	00-Not started	AMUNAR	728786953534945596	5	230731	06:49:09	INACTIVE	06:49:09	CRS998CL
230731	00-Not started	AMUNAR	728786953535046175	5	230731	07:28:15	INACTIVE	07:28:15	CRS998CL
230823	00-Not started	AMUNAR	145918955507611122	5	230823	02:47:06	INACTIVE	02:47:06	CMS226

What we've done – MNS321 Job mass update

- Mass update
 - Change job priority
 - Put on-hold
 - Restart on-hold
 - Cancel on-hold
 - Retry jobs that failed to start (status 15)

The screenshot shows the 'MNS321 Job. Select Operation' interface. At the top, there is a green header with a menu icon and the title 'MNS321 Job. Select Operation'. Below the header is a navigation bar with 'Actions', 'Options', 'Related', and 'Tools' menus, followed by a set of icons for various actions. The main area contains a 'Report version' field with the value 'JKARLSSON'. Below this is a 'Selection' section with several fields: 'Job no' (text input), 'Use job as sel' (button labeled 'Populate selection'), 'Entry date' (calendar picker set to 23/08/29), 'Job name' (text input), 'Job queue' (text input with search icon), 'Job queue prty' (dropdown menu), 'Changed by' (text input with search icon and value 'JKARLSSON'), 'Sub job op' (dropdown menu with a list of options: '1-Change priority', '2-Put on-hold', '3-Restart on-hold jobs', '4-Cancel on-hold jobs', '5-Retry jobs that failed to start'), and 'New job q prty' (text input). The 'From' and 'To' columns are also visible, with 'From' having a date picker set to 23/08/29 and 'To' having a date picker set to 23/08/29. The 'Sub job op' dropdown is currently open, showing the list of options.

What we've done – MNS310 Job

- Selection record notification
 - Displays the number of records you're about to submit.
- Selection limit
 - Stop submission if > limit
- Duplicate job check
 - Allow to submit duplicate job?

The screenshot shows the 'MNS310 Job. Connect Job Queue' interface. The top bar is green with a menu icon and the title. Below the bar are tabs for 'Actions', 'Options', 'Related', and 'Tools', followed by a set of icons. The main area is divided into two sections. The left section, titled 'Details', contains several fields: 'Job' (empty), 'User/group' (JKARLSSON Jorgen Karlsson), 'Job queue' (QBATCH Default job queue), 'Priority' (5), 'Conf job start' (2-Buttons), 'Save job hist' (checked), 'Sel rec notif' (1), 'Selection limit' (empty), and 'Dupl job check' (1-Yes, with a warning). The right section contains a confirmation dialog with the text: 'Confirm start of job MMS621. Max Stock/Order Quantity. Calculate Number of records selected: 10. Continue?' and two buttons: 'OK' and 'Cancel'. Below the dialog, there is a message: 'Job MMS621 is already in queue with same selection, submitted by JKARLSSON, on 20240229, 21:17:04.' and an 'OK' button.

What we've done – Job scheduler

- Every year
 - Possible to schedule once a year.

The screenshot shows the 'SHS230 Job Schedule Information. Open' window. The 'Schedule type' is set to '2-Repetitive'. The 'Settings' section includes:

- Time zone: CST (Cen Stnd Time)
- Now:
- Today:
- Next Monday:
- Next Tuesday:
- Next Wednesday:
- Next Thursday:
- Next Friday:
- Next Saturday:
- Next Sunday:
- Spec date:
- Time:
- Description: Safety Stock/Reorder Point. Ca
- Long descript:

The 'Every year' and 'In month' options are highlighted with a red box. Other options include 'Every month', 'On day', 'Job sched cal', 'Every Monday', 'Every Tuesday', 'Every Wednesday', 'Every Thursday', 'Every Friday', 'Every Saturday', 'Every Sunday', 'Rec action', 'Time limits' (1 - 235900), and 'Date limits'.

What we've done – Job scheduler

- Possible to add/subtract up to +/- 9999 days

The screenshot shows the 'SHS231 Job Schedule Information. Open' window in the M3 Job Management system. The interface includes a top navigation bar with a menu icon and a title bar. Below the navigation bar, there are tabs for 'Actions', 'Options', 'Related', and 'Tools'. The main content area is divided into two sections: 'Program' and 'Detailed Information'. The 'Program' section contains fields for 'Program' (MMS615), 'Field name' (ZFPPER), and 'Description' (acquisition date). The 'Detailed Information' section contains a 'Movement' dropdown menu (00-Fixed date), an 'Add value' input field (0), and a 'Subtract value' input field (0). A red box highlights the 'Add value' and 'Subtract value' input fields.

Program	MMS615	Safety Stock/Reorder Point. Calculate
Field name	ZFPPER	
Description	acquisition date	

Detailed Information	
Movement	00-Fixed date
Add value	0
Subtract value	0

What we've done – Job scheduler

- Multiple runs per day e.g. run a program every 30 minute
- Be able to stop duplicate jobs

SHS230 Job Schedule Information. Open

Actions Options Related Tools + -

Schedule type: 2-Repetitive

Settings

Time zone: CST Cen Stnd Time

Now:

Today:

Next Monday:

Next Tuesday:

Next Wednesday:

Next Thursday:

Next Friday:

Next Saturday:

Next Sunday:

Spec date:

Time:

Sch interval:

Description: Safety Stock, Reorder Point. Ca

Long descript:

Every year: In month:

Every month:

On day:

Job sched cal:

Every Monday:

Every Tuesday:

Every Wednesday:

Every Thursday:

Every Friday:

Every Saturday:

Every Sunday:

Rec action:

Time limits: -

Date limits: -

SHS030 Job Schedule Function. Open

Actions Options Related Tools + -

Function: MMS615

User: JKARLSSON

Detailed Information

JS allowed: 1-Can sch or run

JS category: 24H

Program: MMS615

Job: MMS616CL

Application: MPM

Dupl job check: 2-Yes, with stop

What we've done – Job scheduler – Cluster (1/2)

The screenshot displays two side-by-side panels from the M3 Job Management interface. The left panel, titled 'SHS070 Job Schedule Cluster ID. Open', shows a table with columns 'Jb s cluster ID' and 'Name'. The right panel, titled 'SHS071 Job Schedule Cluster Divisions. Open', shows a table with columns 'Div', 'Description', and 'Company name'. Both panels have a green header bar with navigation menus and a search bar.

SHS070 Job Schedule Cluster ID. Open

Sorting order: 1-Jb s cluster ID View: STD01-01-Standard view fo...

Jb s cluster ID	Name
A	A group of divi
B	Group B
N	NBS job cluster
X	A group of divi
Z	NBS job cluster

SHS071 Job Schedule Cluster Divisions. Open

Sorting order: 1-Jb s cluster ID, Division View: STD01-

Jb s cluster ID: A

Div	Description	Company name
AAA	A group of divisions changed	Infor Dist'n (750/AAA)
BBB	A group of divisions changed	Infor Dist'n (750/BBB)
D01	A group of divisions changed	DPS 750/D01

- Appr 15 finance programs supported
- Schedule one job, get multiple jobs (per division)

What we've done – Job scheduler – Cluster (2/2)



- Cluster field displayed if supported

Schedule type: 1-Once

Jb s cluster ID:

Settings

Time zone: CST Cen Stnd Time

Now:

Today:

Next Monday:

Next Tuesday:

SHS010 Job Schedule Entry. Update

Options ▾ Related ▾ Tools ▾ | + - ↺ ↻ ⌂

Infor M3 Distribution Infor Dist'n (750/AAA)

Sorting order: 1-User, Function, Version, Divisio View: STD0

Function	Version	Status	Company	Division	Job number	Text	Last run	Last run t	Last run status	Schedule date	Schedule time	T
ARS645	1	00-Scheduled	750	AAA	792817005556023030	AR Statement of Account. Open	250313	03:07:03	10	250320	03:07:00	
ARS645	1	00-Scheduled	750	D01	792817005556023218	AR Statement of Account. Open	250313	03:07:03	10	250320	03:07:00	
ARS645	2	00-Scheduled	750	AAA	281290005462543316	AR Statement of Account. Open	250312	01:09:03	10	250319	01:09:00	
ARS645	2	00-Scheduled	750	D01	281290005462543523	AR Statement of Account. Open	250312	01:09:03	10	250319	01:09:00	
ARS645	3	00-Scheduled	750	AAA	281290005463504537	AR Statement of Account. Open	250312	01:25:04	10	250319	01:25:00	
ARS645	3	00-Scheduled	750	D01	281290005463504702	AR Statement of Account. Open	250312	01:25:04	10	250319	01:25:00	
FAS100	1	00-Scheduled	136	440	792817005561306234	FA Depreciation. Create Accoun	250313	04:35:06	10	250320	04:35:00	
FAS100	1	00-Scheduled	136	AAA	792817005561306447	FA Depreciation. Create Accoun	250313	04:35:06	10	250320	04:35:00	
FAS120	1	00-Scheduled	750	AAA	792817005523202530	Cost of Capital. Calculate	250312	18:00:02	10	250319	18:00:00	
FAS120	1	00-Scheduled	750	BBB	792817005523202670	Cost of Capital. Calculate	250312	18:00:02	10	250319	18:00:00	
FAS120	1	00-Scheduled	750	D01	792817005523202789	Cost of Capital. Calculate	250312	18:00:02	10	250319	18:00:00	

- Cluster jobs handled together

What we've done – PIN code improvements

- Possible to set up a PIN code policy
 - Complexity of the PIN code
 - Max attempts
 - Lock out, or delay new attempts

The screenshot shows a web interface for configuring a PIN code authentication policy. The title bar is green and contains the text "MNS157 PIN Code Authentication Policy. Open". Below the title bar is a navigation bar with tabs for "Actions", "Options", "Related", and "Tools", followed by a set of icons. The main content area is titled "Settings" and contains the following configuration options:

Min PIN length	<input type="text" value="6"/>
Upper case char	<input checked="" type="checkbox"/>
Lower case char	<input checked="" type="checkbox"/>
Number	<input checked="" type="checkbox"/>
Special char	<input checked="" type="checkbox"/>
Max attempts	<input type="text"/>
Nbr of minutes	<input type="text"/>

M3 Job Management

M3 Job Management - FAQ/Best practice

FAQ/Best practice

- Parallel jobs?
 - Several auto job instances vs IMQ. => Use IMQ when possible
 - More jobs are not always better!
- Job queues, use several?
 - In theory one job queue could work.
 - However, several job queues together with max nbr of jobs will shorten the sweep time.
 - Single job queue i.e. max nbr of jobs = 1.
- Job scheduler, no change of selection dates on the first run?
 - For the first run the job scheduler uses the input from selection screen, for subsequent runs the selection dates are recalculated.

FAQ/Best practice

- Run CRS998
 - System diagnostic, run at regular intervals
 - Will find issues in your configuration
- Use duplicate check and selection limit in MNS310
 - Will avoid unnecessary job submitting and too large results
- Use max nbr of jobs
 - Will skip to next job queue
- Use IMQ auto jobs when applicable
 - Will be the standard in the future

Apply

Program	Description	Lst run	Last	Sts	
CRCHK002	Check calendar	23-07-31	6:45	00	
CRCHK003	Check number series	23-04-12	8:29	00	
CRCHK004	Check planning values for item/warehouse	22-12-12	22:49	00	
CRCHK005	Check item data	22-12-12	22:55	00	
CRCHK006	Check basic parameters	22-12-12	22:55	00	
CRCHK007	Check sorting options	23-02-16	5:55	00	
CRCHK008	Check dataset tables	22-12-12	22:56	00	
CRCHK009	Check selection filter usage	22-12-12	22:56	00	
CRCHK010	Validate user settings	22-12-12	22:56	00	
CRCHK011	Check adhoc report setup	23-03-14	8:27	00	

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