

NorthWind

PRODUCTION

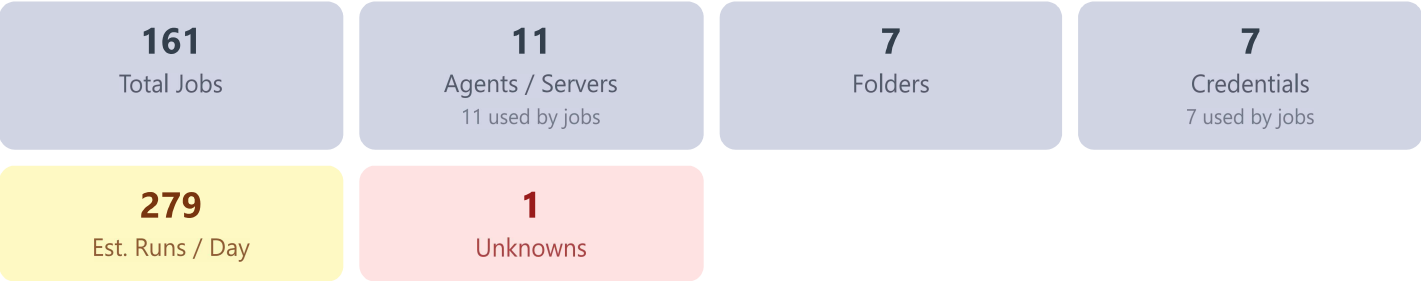
Migrating from BMC Control-M to JAMS Scheduler

Executive migration overview · 9/22/2026 · prepared by Darrell Walker

This overview summarizes the plan to migrate your job scheduling environment from BMC Control-M to JAMS Scheduler. It gives your leadership team a clear, high-level view of the scope, process, and timeline, based on an analysis of an export of your current environment.

Environment Analysis Summary

What we found in the supplied BMC Control-M export, taken from the **Production** environment. Counts cover this one export only — a separate analysis is produced for each environment.



Job Type Breakdown

Native source job types and what each maps to in JAMS.

SOURCE JOB TYPE	MAPS TO (JAMS)	COUNT	SCRIPT / COMMAND KIND	COUNT
OS	Command, PowerShell, UnixScript	138	Shell script (.sh)	80
FILE_TRANS	Command, FileTransfer	12	Windows batch (.bat)	35
DATABASE	OdbcCommand, SQLCommand, SQLStoredProc	7	Executable (.exe)	15
Dummy	Command	1	File transfer	11
OS400	OS400	1	Korn shell (.ksh)	6
SAP	Command	1	SQL	6
Sequence	Sequence	1	Other / command	3
			No-op / empty shell	2
			IBM i / OS400	1
			Sequence / container	1

SCRIPT / COMMAND KIND	COUNT
Shell script	1

Inventory

Objects to be created or mapped in JAMS (this analysis reflects a single environment/extract). "Defined" counts what exists in the source; "used by jobs" counts what the jobs actually reference.

Total jobs	161
Distinct source objects	158
Sequences (multi-step jobs)	1
Folders (in source)	7
Disabled jobs	1

Agents / servers (defined)	11
Agents / servers (used by jobs)	11
Credentials (defined)	7
Credentials (used by jobs)	7
Connections	5
Variables	0
Est. executions / day	279

How Jobs Are Triggered

Run volume is estimated by following the source system's own triggers: clock schedules first, then the jobs those start (sequence steps and jobs that submit other jobs). A prerequisite that merely *gates* an already-scheduled job is counted as a gate, not as a second trigger.

Clock schedule	151
Step of a sequence	3
On another job completing	3
Submitted by another job	0
No trigger found in the export	4

Runs/day (known cadence)	279
Jobs with a known cadence	157
Cadence not determinable	4

Runs/day is an **upper bound**. A job gated by another job's event is counted at the rate that event is posted, capped by its own repeat interval — the export cannot say how often the gate actually opened.

Items Needing Attention

Everything in the export the conversion could not settle on its own, grouped by the kind of attention it needs. Each block is one area and its count is the number of findings in it — a job with findings in two areas is counted in both, so the blocks are not a job total. The dot on each line is its severity: red makes the job non-runnable until it is dealt with, amber is likely to fail at run time, grey is worth confirming but will not stop the job.

Notifications 93 items 92 ACTIONABLE

- The notification text, command or file paths use a Control-M built-in variable with no JAMS equivalent; it resolves to nothing at run time — in a file path that means a wrongly-named file rather than a visible failure. Replace it with the matching JAMS variable. CONTROLM_MACRO_UNMAPPED ×63
- The overrun alert raises a JAMS event without cancelling the job, matching Control-M. The Control-M SHOUT destination is not in the export, so a send-email element was scaffolded with no recipient — add an address to route this alert separately. The JAMS default catch-all notification delivers it until then. CONTROLM_SHOUT_DESTINATION_UNRESOLVED ×15
- An email notification was mapped — verify the recipient and trigger (on-start/success/error) in JAMS. EMAIL_NOTIFICATION_MAPPED ×14
- Two overrun alerts shared an urgency, so the second was moved to the next JAMS event class to keep the two notification paths separate. No action needed unless you want them merged. CONTROLM_RUNAWAY_EVENT_CLASS_ASSIGNED ×1

Job source / command 11 items 10 ACTIONABLE

- A Control-M export records a stored procedure's parameter names, types and directions but not their values — supply the values on the JAMS job. CONTROLM_DB_STORED_PROC_PARAMS ×3
- The command runs a Control-M agent utility that exists only on a Control-M agent, so the job will fail as imported. Replace it with the JAMS construct that does the same thing — for ctmfw, a file dependency on the job; for ctmftps, a FileTransfer job. CONTROLM_AGENT_UTILITY_COMMAND ×1
- Control-M does not run a command line on a database job — the job's SQL came from its %%DB- variables and the leftover command line was left out. Create a separate job for it only if it is still meant to run. CONTROLM_DB_CMDLINE_IGNORED ×1
- The job targets a database other than SQL Server, so it was imported as an OdbcCommand job with its SQL carried across unchanged. A Control-M export contains no server, credentials or driver for the connection profile — set the job's SQL Connection property, or put a driver-specific connection string in its.ConnectionString parameter. CONTROLM_DB_TYPE_NOT_SQLSERVER ×1
- Control-M forced this job to complete OK on specific return codes (named in the warning). Set the equivalent success exit codes on the JAMS job so those outcomes are not treated as failures. CONTROLM_FORCE_OK_IGNORED ×1
- The transfer reads from the remote server but the source names no file to fetch — only a directory, or no path at all. A remote file specification is required on a receive (blank selects nothing, unlike a send where blank keeps the source name). Set the file name or mask in JAMS. CONTROLM_FTP_NO_SOURCE_FILE ×1

- A Control-M “Watch only” transfer definition waits for a file to reach a size or pass a time limit and moves nothing — a precondition, not a transfer. JAMS has no equivalent on a FileTransfer job, so it was not imported. Add a file dependency in JAMS if the wait matters. CONTROL_M_FTP_WATCH_ONLY ×1
- The job type has no JAMS REST source schema — an empty Command shell was created; add the command/source in JAMS. CONTROL_M_SOURCE_NOT_WRITTEN ×1
- The job uses a Control-M variable function (SUBSTR, CALCDATE, WCALC, GETENV...). These take arguments rather than resolving to a value, so the expression was carried across exactly as written instead of being rewritten into something that resolves to nothing. Translate it to the equivalent JAMS expression. CONTROL_M_VARIABLE_FUNCTION ×1

Schedules 13 items 11 ACTIONABLE

- Source used a calendar-based schedule — map it manually to a JAMS date-arithmetic schedule. CONTROL_M_CALENDAR_SCHEDULE ×1
- Control-M stopped this cyclic job on a condition (SPCYC); JAMS has no equivalent early-stop and keeps resubmitting across the run window. Review the stop condition and bound the repeat interval in JAMS. CONTROL_M_CYCLIC_STOP_IGNORED ×1
- The job’s run days come from a Control-M calendar whose definition is not in a job export — only the name, which the message gives. No trigger was created and its dependencies wait rather than start, so nothing submits it. Recreate that calendar’s pattern as a schedule trigger and the dependency will gate it. CONTROL_M_GATED_WITHOUT_TRIGGER ×1
- No schedule trigger was created (runs on demand) — add a trigger in JAMS if it should run on a clock. CONTROL_M_NO_SCHEDULE ×1
- The run days came from the export but the run time did not, so the trigger was created at 00:00. Set it to the Control-M new-day (order) time — a server setting that is not part of a job export. CONTROL_M_ORDER_TIME_ASSUMED ×1
- The job has no run time of its own, so the trigger was set to the start time of the earliest scheduled job in the chain that feeds it — the whole chain becomes eligible together and the dependencies order it. Adjust only if your Control-M new-day (order) time differs. CONTROL_M_ORDER_TIME_FROM_CHAIN ×1
- The job states no run days at all, so Control-M never orders it automatically — it is run by hand or forced by another job. Nothing submits it as imported. Submit the flow on demand in JAMS, or add one schedule trigger to the job at the head of it and the dependencies will carry the rest. CONTROL_M_ORDERED_ON_DEMAND ×1
- Run days come from a Control-M calendar the job names but the export does not define — only the name, which the message quotes. No trigger was created; recreate that calendar’s pattern as a schedule trigger in JAMS. CONTROL_M_RBC_SCHEDULE ×1
- A JAMS runaway limit was derived from a SHOUT LATETIME (late-to-finish) deadline minus the scheduled start. Verify the runaway duration is the intended maximum run time. CONTROL_M_RUNAWAY_FROM_DEADLINE ×1
- A JAMS stalled limit was derived from a SHOUT LATESUB (late-to-start) deadline minus the scheduled start. Verify the stalled duration — it alerts when the job has not started in time (e.g. a missing dependency). CONTROL_M_STALLED_FROM_DEADLINE ×1

- The job has no schedule of its own but is submitted by another job's DO FORCEJOB action, which became a JAMS job-completion trigger. It runs when that job reaches the matching outcome. CONTROLM_SUBMITTED_BY_FORCE ×1
- The job states a start time but no run days at all, so Control-M never orders it automatically — it is run by hand or forced. No trigger was created because picking run days would invent a schedule. If it should run on a clock, add a trigger at the time given in the message with the intended days. CONTROLM_TIME_WITHOUT_RUN_DAYS ×1
- A completion deadline/SLA was mapped to the JAMS SLATime property (an absolute time of day the job must complete by). Verify the time in JAMS. SLA_MAPPED ×1

Dependencies 3 items 3 ACTIONABLE

- A dependency (INCOND) had no producer in the export and was skipped — verify/re-create it in JAMS. CONTROLM_DEPENDENCY_UNRESOLVED ×1
- On completion the job set a Control-M variable (a global one if the name starts with a backslash) that other jobs read. JAMS has no equivalent action on a job, so it was not converted — reproduce it with a final step that sets a JAMS variable, or with a job dependency if the variable only existed to sequence work. CONTROLM_DOVARIABLE_IGNORED ×1
- The job uses OR-logic input conditions; JAMS triggers are additive — verify the predecessor logic in JAMS. CONTROLM_OR_DEPENDENCY ×1

Connections 11 items 11 ACTIONABLE

- Configure the file-transfer connection (server, paths, credential) for this FileTransfer job in JAMS. CONTROLM_FTP_MANUAL_CONFIG ×10
- The source transfers directly between two remote hosts. A JAMS FileTransfer job moves files between one connection and the agent's local filesystem — split it into two steps staging the file locally. CONTROLM_FTP_REMOTE_TO_REMOTE ×1

Job structure / naming 2 items 2 ACTIONABLE

- Two source jobs shared a name in the same folder (JAMS requires unique names per folder); this one was auto-renamed with a numeric suffix. Verify it is a genuine duplicate (e.g. an ad-hoc variant) and rename or remove it if not needed. CONTROLM_DUPLICATE_JOB_NAME ×1
- The Control-M job defined several numbered transfers, which a single JAMS FileTransfer job cannot express — it was imported as a Sequence with one child job per transfer (hence more jobs than the export). Verify the step order and each child's paths. CONTROLM_MULTI_TRANSFER_SEQUENCE ×1

Informational 3 items

- The job launches an SSIS package through the SSISDB catalog; the T-SQL was carried across in full and runs the package exactly as Control-M does. Switch it to a native JAMS SSIS execution method if you would rather manage the package directly. CONTROLM_DB_SSI_PACKAGE ×1
- CONTROLM_DUMMY_COMMAND_IGNORED CONTROLM_DUMMY_COMMAND_IGNORED ×1

- The command line gave no platform clue of its own, so the job was mapped from what its agent runs elsewhere in the export rather than from the Unix-script default. Verify the execution method if this job really targets UNIX. CONTROLM_PLATFORM_INFERRED ×1

Disabled jobs 1 item 1 ACTIONABLE

- Job was retired in the source (ACTIVE_TILL in the past), so it was imported disabled — enable it in JAMS when ready. CONTROLM_RETIRED ×1

Other 1 item 1 ACTIONABLE

- Job documentation was not written (no endpoint yet) — re-add the documentation in JAMS if needed. CONTROLM_DOCUMENTATION_DEFERRED ×1

Resources 1 item 1 ACTIONABLE

- Quantitative/control resources were not converted — configure JAMS resources/concurrency manually. CONTROLM_RESOURCE_DROPPED ×1

Unclassified Jobs (1)

These jobs could not be classified to a JAMS execution method automatically — the source detail must be supplied during build. Each is a scope unknown worth confirming.

JOB NAME	FOLDER	EXEC METHOD	ACTION TYPE
OPS-SAP-VARIANT-RUN	\NW-OPS-UTIL	Command	NoOp

How the Migration Works

1

Planning

Confirm architecture, licensing, environments, and go-live dates.

2

Install & Configure

Activate the JAMS Scheduler license and configure it for your use cases.

3

Training

Your team learns to build, run, and monitor jobs in JAMS Scheduler.

4

Validation

Confirm the new environment is working correctly with sample jobs.

5

Migrate & Test

Convert prioritized jobs, test results, and hand off to your team.

Conversion Outcome

What the converter produces for each job in the export, worst case first. Every job appears in exactly one row.

OUTCOME	JOBS	SHARE	WHAT IT MEANS
Runnable as converted	147	91%	Nothing further needed.

OUTCOME	JOBS	SHARE	WHAT IT MEANS
Needs configuration	10	6%	Built correctly, but a connection, credential or agent must be set up first.
No-op by design	3	2%	A no-op at the source too (a flow anchor) - converted faithfully, no work to do.
Stub - empty body	1	1%	Created, but it will run, do nothing and report success. Supply the source.

1 stub job were created with an empty body: they will run, do nothing, and report success. Supply the source for these before go-live — they are the one outcome a green test run will not catch.

Estimated Effort & Timeline

Migration effort is driven by what has to be built by hand, not by how many jobs there are — a job type that converts automatically costs the same whether there are ten of them or three thousand.



PHASE	DURATION	BASIS
Discovery & Design	2 wk	Inventory review, environment access, JAMS design & standards.
Build & Convert	2–2.5 wk	147 jobs runnable as converted; 10 awaiting an object to be set up; 1 built by hand across 0 distinct shapes (1 engineer).
Test & Cutover	1 wk	Parallel runs, UAT, and production cutover.
Total	5–5.5 weeks	1 engineer · ~10.7 build person-days

Where the build effort goes

WORKSTREAM	PERSON-DAYS	BASIS
Pattern mapping	9.6	27 distinct job shapes, 5 samples verified each
Environment setup	0.8	11 agents, 7 credentials, 5 connections, 0 variables
Stub jobs	0.1	1 created with an empty body at 1h each — each needs its source supplied
Bulk conversion	0.1	161 automated objects at 4h per 1,000
Unresolved items	0.1	1 not already counted as a manual build

Assumptions: 1 engineer(s) · 2-week discovery · 1h per new hand-built shape, 10m per repeat · 0.5h per agent, 5m per credential · 4h per 1,000 automated objects · test = 40% of build · 20% contingency. A heuristic from the inventory above, refined during Planning — not a quote.

Basic Scope of Work

In Scope

- Installation and configuration of JAMS Scheduler in your target environment.
- Conversion of prioritized jobs identified from the BMC Control-M extract.
- Administrator and end-user training on JAMS Scheduler.
- Working sessions to test and validate converted jobs.
- A summary report of job conversion and test results.

Out of Scope

- Custom development outside standard job conversion.
- Migration of jobs not included in the agreed priority list.
- Changes to upstream or downstream systems that call BMC Control-M today.
- Ongoing production support after project handover.

Assumptions

- Customer provides a current export of scheduler jobs in a readable format (XML, CSV, etc.).
- A BMC Control-M administrator is available throughout the engagement to reduce delays.
- Target servers meet JAMS Scheduler's minimum specifications before kickoff.
- Origin and destination environments (OS, application versions) are compatible.

Counts are taken directly from the supplied export; an incomplete export yields an incomplete picture. This analysis reflects a single environment/extract.

Executions-per-day is a best-effort upper bound. It follows the source system's own trigger edges rather than clock schedules alone, counts a prerequisite as a gate on an already-scheduled job rather than as a trigger that starts one, and excludes jobs whose cadence is not present in the export.

This estimate is a scoping heuristic based on the inventory and the assumptions shown — not a fixed quote. It is driven by the work that cannot be automated (hand-built workflows, unresolved items, environment setup) rather than by job count. Final effort is confirmed during Planning.