



SOLUTION SHEET

Successful project handover for data centers

How to avoid operating a new data facility while reconstructing the enterprise asset management system from scratch



Data center construction is accelerating at an unprecedented pace. Design/build schedules are being compressed into months and data centers are expected to come online immediately and cleanly, instantly achieving and maintaining very high levels of reliability with annual downtime measured in minutes.

This creates a specific, largely unaddressed problem for data centers. Fast-track execution results in poor transfer of design and construction asset data and the site team inherits a disjointed library of incomplete, inaccurate and often inaccessible information

scattered across various formats. The operations team is then forced to learn as they go, stumbling through a startup as they struggle to rebuild the asset management data they expected to receive.

This solution guide helps owners and facility teams understand how and why this happens and provides suggestions to avoid the problem altogether.

A recipe for failure

Construction data management systems are optimized for high-speed design, approval and fabrication. Enterprise asset management systems are designed to support decades of operation, maintenance and asset performance. The two are fundamentally different, so bridging one phase to the other takes a deliberate strategy. Many projects wait until completion to convert design and construction information into a form the owner/operator can use. With rare exception, these after-the-fact efforts fail.

This is not a technical, data-related issue. It's foundational. Much of the design, revision and commissioning information generated during construction is critical to the operating team and that data must be maintained, updated and delivered in a format the owner can use for ongoing facility operations.

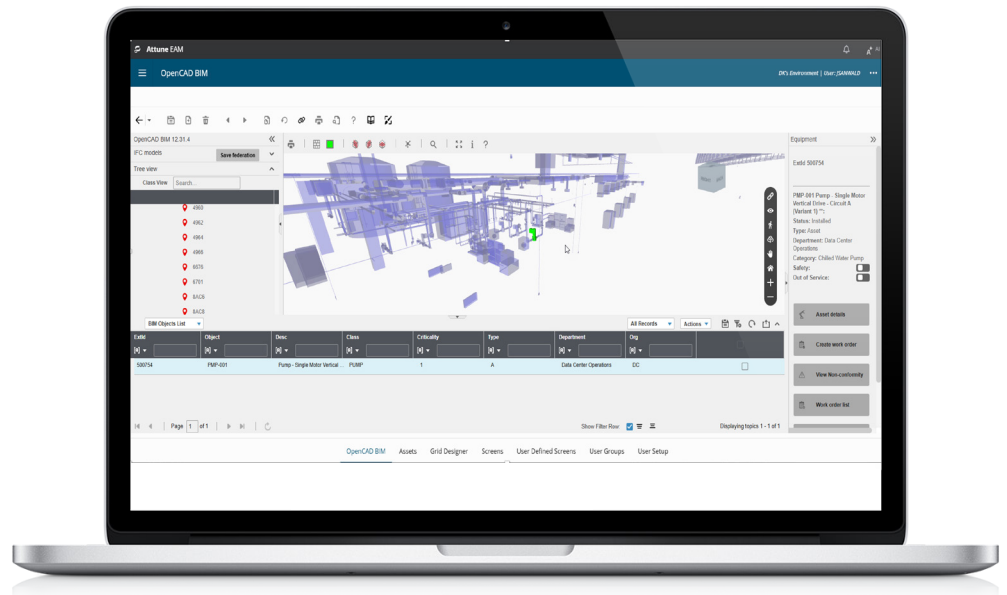


Key steps for successful data center project handovers

- 1. Define the asset data standard in the contract, not at commissioning:** A successful data center handover starts with a strong data asset framework built for both construction and operations. This requires selecting a data architecture and platform that suits the needs of every contractor, while providing the information necessary to operate and maintain the facility. This decision must be made at the very beginning of the project with contracts written to reflect it. Only then can the data be entered, updated and maintained in a way that serves both needs.
- 2. Treat the digital twin as an operational asset, not a construction deliverable:** Building information and 3D construction models need to be built, updated and maintained in a format that is accurate and accessible to the owner/operator's enterprise asset management (EAM) system at project completion. That means a common format from day one, corrected and revised continuously as changes happen throughout construction and commissioning.
- 3. Run commissioning as a data capture and a verification process:** Commissioning is more than a checklist confirming asset functionality. It is an opportunity to capture pre-start functional data for every asset on the project. Run commissioning through capable digital turnover software and every loop check, equipment energization, motor check and integrated system test becomes part of the permanent asset data record.
- 4. Require a structured transfer of care, custody and control (TCCC) process with defined acceptance criteria:** TCCC is more than just a project and legal milestone. It is the moment when the EAM system becomes the owner/operator's responsibility. Owners typically focus on data center system functionality, but equally critical are acceptance criteria that verify asset data systems are complete, accurate, up to date and accessible.
- 5. Plan for operational readiness before handover, not after:** A common mistake is treating operational readiness as an activity that begins near project completion. Instead, operations teams should be engaged throughout the engineering and construction phases, creating a clear path to operability as the asset moves toward commissioning and startup. Their early involvement ensures asset information is defined, captured and structured as work is performed rather than reconstructed at handover. This allows EAM systems and supporting operational processes to be configured around complete, verified asset data, enabling a smoother transition from construction into safe, reliable operations.

Five essentials for build-to-operate continuity

1. Capture structured asset data directly from construction workflows
2. Connect to building information models and virtual design construction environments to extract operationally relevant data
3. Support digital turnover packages and completion management during construction phase
4. Provide an EAM system that the operations team can use from day one
5. Integrate with existing project controls and capital planning tools without requiring a separate data reconciliation step



Accurate and complete asset and 3D model data are critical for data center operation and maintenance. Capture it during construction so it never has to be recreated later.

An unsuccessful data center project handoff has the operations team inheriting a mismatched set of incomplete and inaccurate spreadsheets, drawings and inaccessible 3D models. Ultimately, personnel spend the first few years trying to create an accurate EAM system from the limited information available.

A successful data center project handoff happens when the owner defines the data architecture at

procurement and drives results through contractual commitments. Construction contractors deliver tagged asset data mapped into the EAM schema, commissioning documentation is loaded directly into the platform and the TCCC acceptance includes data verification. Ultimately, the operations team starts with a complete, accurate and fully populated data asset system on day one.

For more information on Octave Attune EAM, please visit [Octave.com](https://octave.com).

About Octave

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