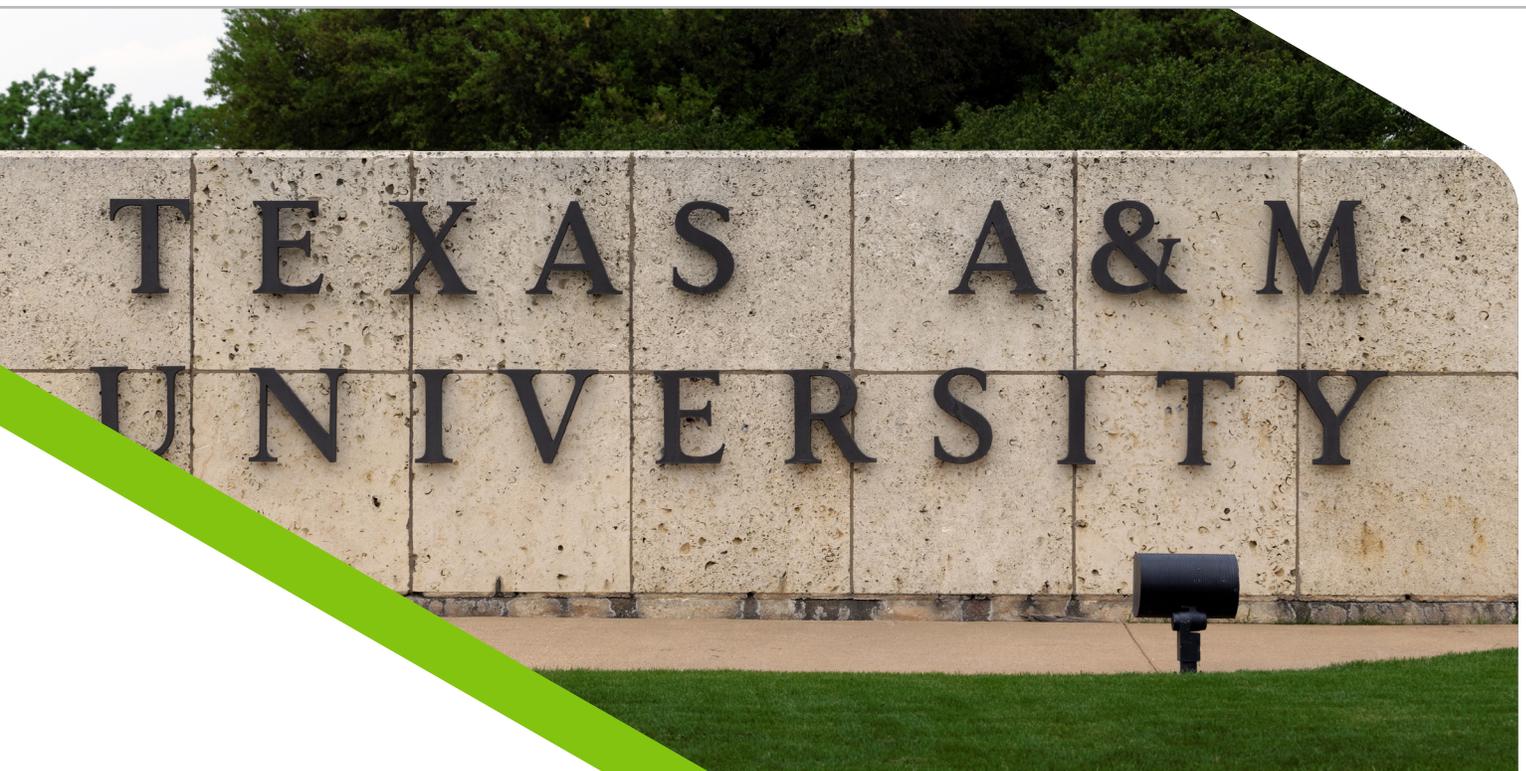


# Texas A&M Increases Workflow Efficiency and Cuts Manual Work with HxDR Reality Cloud Studio

**Brad Hollas, Facilities Analytics & Mapping Director, shared:** “Since implementing Reality Cloud Studio, we’ve seen an increase in efficiency through streamlined Revit workflows and faster geometry validation. Manual work has been reduced thanks to centralized imports that eliminated redundant modeling tasks, and we’ve also decreased storage costs with secure, US-based storage that reduces network traffic and ensures compliance.”





## Challenge:

- **Inefficient workflows:** Managing large point cloud datasets throughout the Scan-to-BIM process was time-consuming and resource-intensive
- **Reduced productivity:** Importing point clouds into Revit frequently caused slowdowns, negatively impacting modeling speed and overall project timelines
- **Limited scalability:** The team was missing a streamlined and reliable way to process and manage growing volumes of reality capture data across multiple phases and millions of square feet
- **Data silos:** Sharing point cloud visualizations with other departments and stakeholders was challenging, limiting collaboration and decision-making
- **No centralized, secure platform:** The university needed an efficient, compliant solution for long-term storage and access to scanned data, Revit models, and associated building information

## Solution:

- **Efficient and Productive Workflows:** HxDR Reality Cloud Studio provided seamless compatibility with Texas A&M's Scan-to-BIM processes, eliminating performance slowdowns during point cloud import
- **Strategic Platform Selection:** During the evaluation phase, Texas A&M compared solutions and chose Reality Cloud Studio for its flexible cost model and the freedom of owning their own data, ensuring long-term scalability
- **Scalable, Secure, and Centralized:** HxDR Reality Cloud Studio now serves as the single-entry point for stakeholders to visualize, collaborate, and share 3D data. The platform integrates directly with Texas A&M's IWMS platform, Archibus, where vector geometry drives key operational processes.
- **Validated Geometry for Compliance:** The team uses .E57 files, panoramic images, and immersive 360° views to validate geometry, fulfilling state reporting requirements and building leadership confidence in the approach.
- **User Experience:** Reality Cloud Studio provides an intuitive platform with streamlined access to point cloud data and panoramic imagery, making it easier for teams to validate, manage, and share spatial information.

## Value:

- **10.5M+ square feet scanned:** Texas A&M has scanned more than 200 buildings and is currently advancing through six phases of a campus-wide rollout, proving the scalability of Reality Cloud Studio.
- **Increase in workflow efficiency:** Streamlined Revit workflows have accelerated geometry validation and improved overall productivity
- **Reduction in manual work:** Centralized imports have eliminated redundant modeling tasks and reduced time-consuming manual processes. Even more improvements are anticipated with the release of Deviation Analysis and Classification.
- **Decrease in storage costs:** Secure, US-based storage has lowered network traffic and ensured compliance
- **One centralized system of record:** HxDR Reality Cloud Studio now unifies raster scans, vector BIM models, and structured data for all stakeholders
- **3x expansion of use cases:** Texas A&M can now relate scans across projects, geotag equipment beyond building models, and make more informed decisions with richer context and accuracy, supporting operations, leadership, and space planning
- **A single source of truth for 3D data:** Reality Cloud Studio houses all scanned data, Revit files, and lifecycle management models, providing easy access for stakeholders



## About the Client:

Texas A&M University in College Station, Texas, is a flagship public research institution and one of the largest universities in the United States. With more than 12,000 employees, excluding student workers, graduate assistants, and temporary staff, the university generates approximately \$2.55 billion in annual revenue. Texas A&M is widely recognized for its world-class research, highly ranked academic programs, and strong industry partnerships. As a member of the Association of American Universities, it holds a global reputation for innovation, leadership, and impact in education, research, and public service.

Within the Operations Division, the Facilities Analytics & Mapping team oversees Texas A&M University's official campus space inventory, which includes comprehensive floor plans and advanced digital building models. The team plays a pivotal role in fulfilling state and federal space reporting requirements and serves as a key partner in campus planning, infrastructure development, and strategic decision-making that guides the growth and management of the university's extensive facilities.

## Challenge:

Texas A&M University faced technical obstacles in managing large point cloud datasets throughout the Scan-to-BIM workflow. Importing point clouds into Revit was often slow, creating performance issues that negatively impacted modeling efficiency and overall productivity. The team needed a more reliable and scalable approach to process and manage their reality capture data effectively.

Another major challenge was the lack of centralized access to data, which created information silos and made it difficult to visualize and share 3D information with internal stakeholders, including other departments. Visualizing point cloud data for broader use across the university was cumbersome, further limiting collaboration and slowing decision-making. The team wanted a secure and efficient platform that could enhance visualization while also providing centralized access and long-term storage to manage and share reality capture datasets at scale.

## Solution:

Texas A&M University implemented HxDR Reality Cloud Studio as a core part of its Scan-to-BIM workflow, enabling the Facilities Analytics and Mapping team to manage reality capture data and improve collaboration across departments. During the evaluation phase, the team compared alternative competitor solutions but ultimately selected HxDR Reality Cloud Studio for its flexible cost model and the freedom to own their own data, ensuring long-term scalability.

Using a fleet of Leica and non-Leica LiDAR scanners, the team captures point cloud data across campus and develops detailed LOD 200 BIM models in Revit. Integrating HxDR Reality Cloud Studio has streamlined point cloud imports, advanced modeling performance, and provided secure, centralized access for other departments and stakeholders.

The team leverages .E57 files, panoramic images, and immersive 360° views to validate geometry, which informs state reporting requirements. This validation process helped build leadership confidence in the approach.

The project was structured in phases, with the largest phase covering approximately 3 million square feet and an initial focus on the College of Arts and Sciences. The generated LOD 200 BIM models support square footage takeoffs and integrate with Texas A&M's IWMS platform, Archibus, where the vector geometry drives key operational processes.

HxDR Reality Cloud Studio also enables facilities coordinators and leadership to explore spaces virtually without traveling across campus. The immersive panoramic views provide visual context that supports accurate space coding for more than 150 room-type codes. The imagery has become a valuable resource for operations, facilities, and leadership, evolving into a product itself.

The current workflow is efficient and productive: scanned 3D data is registered with Leica Register 360, the point cloud is accessed from Reality Cloud Studio and then imported into Revit with Leica CloudWorx to stream the point clouds directly into the Revit environment. This integration eliminates performance slowdowns, allowing large datasets to be processed and modeled with ease, all directly within the browser.



Close up of point cloud in HxDR Reality Cloud Studio



Close up of point cloud in HxDR Reality Cloud Studio

## Value

With the implementation of HxDR Reality Cloud Studio, Texas A&M University has significantly enhanced how it manages and utilizes reality capture data across its expansive campus. The team has scanned more than 200 buildings, covering over 10.5 million square feet, and is steadily advancing through six planned phases of campus-wide scanning. HxDR Reality Cloud Studio now serves as the centralized platform for all scanned data, and lifecycle management point cloud models, providing a single source of truth for 3D data.

The phased rollout has demonstrated the scalability of the solution and established an efficient process that can be replicated for future projects. Brad Hollas, Facilities Analytics and Mapping Director, shared: “Since implementing Reality Cloud Studio, we’ve seen an increase in efficiency through streamlined Revit workflows and faster geometry validation. Manual work has been reduced thanks to centralized imports that eliminated redundant modeling tasks, and we’ve also decreased storage costs with secure, US-based storage that reduces network traffic and ensures compliance.”

Immersive visuals have expanded use cases threefold, with the data now supporting operations, leadership, and space planning. The team can relate scans across projects, geotag equipment beyond the scope of building models, and make more informed decisions with greater context and accuracy.

Hongjia Zho, BIM Coordinator for the Facilities Analytics and Mapping team, added, “Reality Cloud Studio has made our Scan-to-BIM workflow noticeably more efficient and has greatly improved the way we visualize and share spatial data both internally and externally.”

Looking ahead, Texas A&M plans to continue expanding its use of HxDR Reality Cloud Studio as it advances through additional phases of campus-wide scanning. The platform has not only optimized current workflows but also laid the foundation for future growth, enabling the university to manage its facilities more strategically, plan for upcoming renovations and new construction, and ensure that every decision is supported by accurate, accessible, and comprehensive 3D data.



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