PolyWorks DataLoop™

The digital connectivity solution that interconnects all the people that capture or need access to 3D measurement information

innovmetric

PolyWorks|DataLoop™ is the next-generation data management solution that allows enterprisewide sharing of 3D measurement data and results, contributing to the digital transformation of your organization. It provides a digital collaboration platform that facilitates teamwork by interconnecting all team members that capture or need access to 3D measurement information.

Robust 3D Measurement Data Management

PolyWorks|DataLoop is a scalable data management solution that allows you to optimally handle the vast amount of data produced by your 3D measurement activities by managing your inspection projects, their revisions, and 3D measurement data.

Centralize 3D measurement data storage
Store your valuable 3D measurement data on a modern replicated storage infrastructure and enjoy peace of mind.

Leverage the popular Microsoft SQL Server solution
Base your data vault on Microsoft's proven SQL Server solution and its extensive network of support and service partners.

Tailor the hardware setup to your business needs
Host the data management system on a single server located on premises or in the cloud, or deploy multiple servers with real-time data replication.

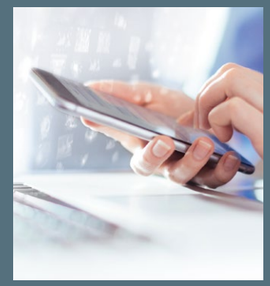
Automate file and folder management
Automate the handling of all your project files and folders to eliminate manual operations that might corrupt the data.

Maximize data transfer speed
Download and upload projects in a flash thanks to intelligent caching strategies and minimal data transfer techniques.

Minimize disk space use
Reuse already-stored scanned data or CAD models when creating new projects without using additional disk space.

Data Access Made Easy

Find an inspection project by entering a part number. Retrieve the 3D measurement data of a defective piece from its serial number. It's now that easy. The days where you had to browse for a file or folder on a local or network disk are now gone. Welcome to the new world of PolyWorks|DataLoop, where you search for meaningful content!



Index all your meaningful information
Identify the key pieces of information in your parts and processes and use custom properties to index them in the database.

Find projects and measured pieces easily
Find and open archived projects and measured pieces effortlessly by searching for them based on indexed properties.

Accelerate your searches by filtering search results
Use our powerful filtering tools to narrow the search results and easily find the data you're looking for.

Manage inspection project permissions
Control the access to your projects to protect templates from being overwritten or set up a restricted portal for external collaborators.

Digital Connectivity that Boosts Teamwork Efficiency

PolyWorks|DataLoop profoundly transforms the processes and human interactions of the teams that capture or need access to 3D measurement data, thanks to its multiplatform flexible digital framework, digital communication tools, and concurrent access capabilities that allow teams to review, edit, and measure one inspection project simultaneously.

Review data through a Web or mobile interface

Reach colleagues who do not have access to PolyWorks® or are not in front of their computers in order to review 3D measurement data collaboratively.

Share 3D measurement data instantaneously

Share with a colleague a clickable hyperlink that opens an inspection project in 3D from a specific point of view.

Discuss dimensional issues with colleagues directly

Open a discussion thread within an inspection project and tag specific colleagues to collaborate digitally.

Initiate urgent investigation tasks easily

Collaborate with unlicensed users up to 5 times a year at no extra cost when investigating urgent manufacturing issues.

Monitor and analyze 3D measurement results in real time

Review customizable dashboards and trend charts, and drill down within inspection projects while the team is still measuring.

Improve inspection projects collaboratively

Edit an inspection project with several colleagues, and be notified when an updated piece uploaded by a colleague is available.

Measure multiple pieces concurrently

Measure multiple pieces on multiple sites and upload the measured pieces in the same project at the same time.

Compliant with your IT Team Requirements

PolyWorks|DataLoop offers all the functionalities that your IT team expects from a professional data management solution to ensure a smooth integration within your enterprise processes.

Configure the system hassle free

Create databases, configure parameters, review information, and test the system within a user-friendly configuration tool.

Access 3D measurement data using network credentials

Implement Microsoft's Active Directory service to quickly provide access to 3D measurement data to all networked users.

Benefit from HTTPS encryption and access token security

Protect sensitive data using industry-standard encryption and security best practices.

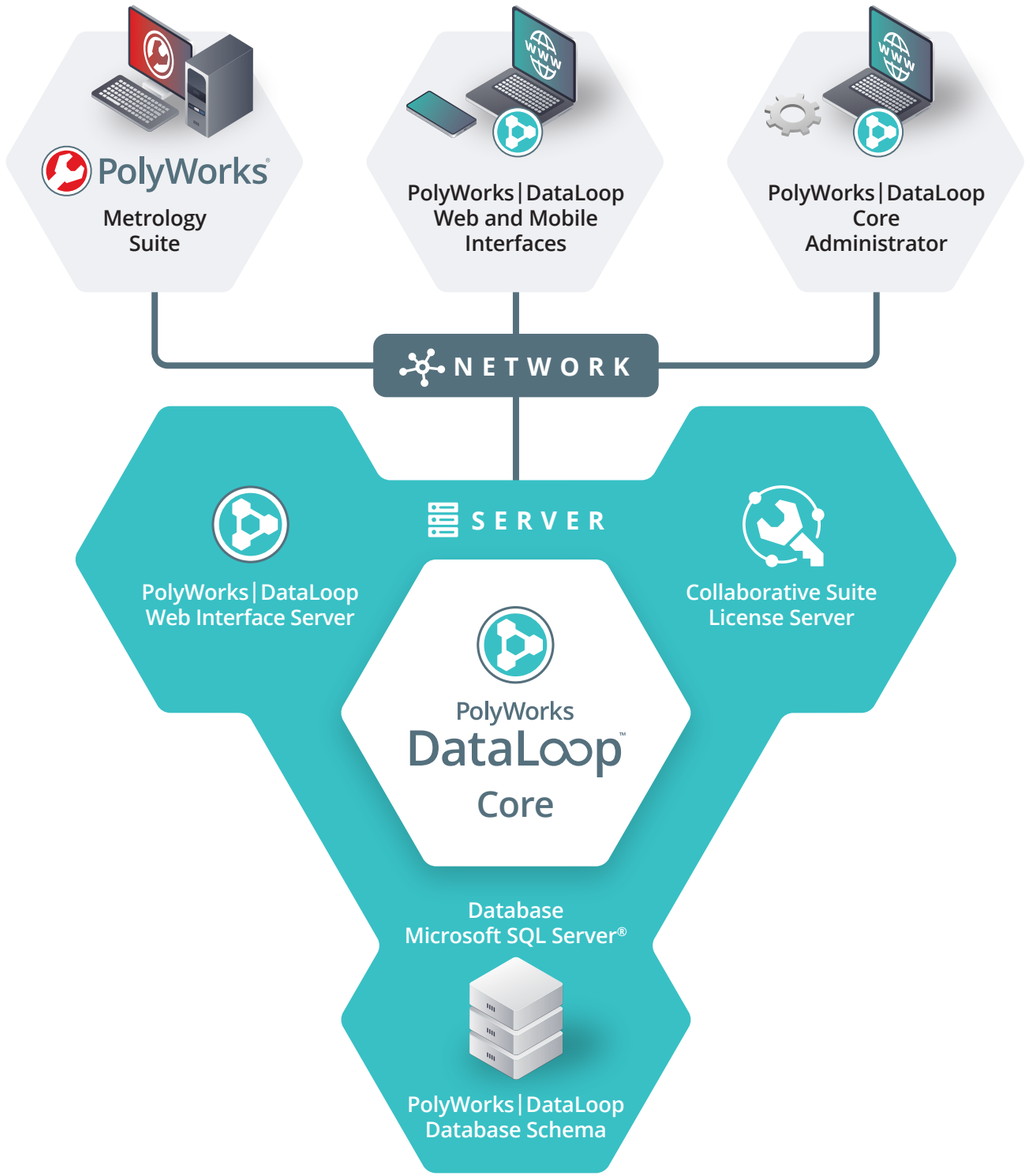
Backup your 3D measurement data efficiently

Safeguard your entire 3D measurement data all at once by backing it up to magnetic tape or an online storage service.

Technical Specifications

PolyWorks|DataLoop Three Tier Architecture

PolyWorks|DataLoop requires that certain server applications be installed and configured. The following schema shows how PolyWorks® applications communicate with one another as well as with Microsoft SQL Server.



Technical Specifications

Server recommendations for PolyWorks|DataLoop

To use PolyWorks|DataLoop, a network infrastructure must be set up with potentially multiple servers. The number of servers and their configurations depend on the number of users that are expected to interact with the servers.

Recommendations for up to 50 users with a single server

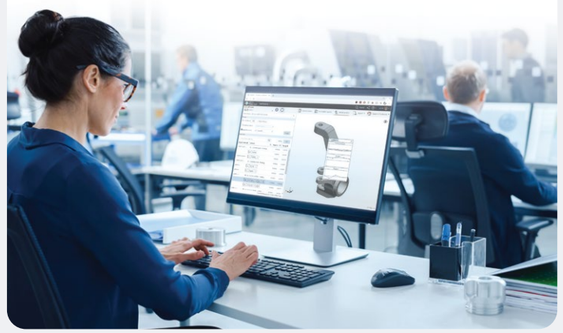
Machine configuration:

- **Operating system:** Microsoft Windows Server 2016 or later
- **CPU:** 4 physical cores
- **RAM:** 32 GB
- **Disk space:**
  - 500 GB on a solid-state drive (SSD) for the operating system, all components to install, as well as for the Microsoft SQL Server instance and database files.[a]
  - At least 1 TB on a hard disk drive (HDD) for the Microsoft SQL Server FILESTREAM data.[a]
- **Software components:**
  - Microsoft SQL Server 2017 or later
  - PolyWorks|DataLoop Core
  - PolyWorks|DataLoop Web Interface Server[b]
  - PolyWorks Collaborative Suite License Server
  - Internet Information Services (IIS)
  - SSL certificate - required for the HTTPS communication to the server[c]

a. The required size varies depending on the volume of data stored in the file system. A monitor software should be configured to send alerts when disk space is low.

b. PolyWorks|DataLoop Web Interface Server must not be installed on a domain controller server.

c. SSL certificates issued from a well-known certification authority are recommended.



Recommendations for 50 to 250 users with two separate servers

Server 1 configuration:

- **Operating system:** Microsoft Windows Server 2012 R2 or later
- **CPU:** 8 physical cores
- **RAM:** 32 GB
- **Disk space:**
  - 500 GB on a solid-state drive (SSD) for the operating system, all components to install on this server as well as for the Microsoft SQL Server instance and database files.[a]
  - At least 20 TB on a hard disk drive array (HDD RAID) for the Microsoft SQL Server FILESTREAM data.[a]
- **Software components:**
  - Microsoft SQL Server 2017[bc] or later
  - Internet Information Services (IIS)

a. The required size varies depending on the volume of data stored in the file system. A monitor software should be configured to send alerts when disk space is low.

b. We recommend that you do not install Microsoft SQL Server on a domain controller.

c. Microsoft SQL Server Enterprise Edition is recommended if 24/7 operation is required and no downtime is expected.

Server 2 configuration:

- **Operating system:** Microsoft Windows Server 2016 or later
- **CPU:** 4 physical cores
- **RAM:** 16 GB
- **Disk space:** 250 GB on a solid-state drive (SSD)
- **Software components:**
  - PolyWorks|DataLoop Web Interface Server[a]
  - PolyWorks|DataLoop Core
  - PolyWorks Collaborative Suite License Server
  - Internet Information Services (IIS)
  - SSL certificate - required for the HTTPS communication to the server[b]

a. PolyWorks|DataLoop Web Interface Server must not be installed on a domain controller server.

b. SSL certificates issued from a well-known certification authority are recommended.

PLM Connectors

The PolyWorks|DataLoop PLM connectors digitally interconnect your Product Lifecycle Management and 3D measurement ecosystems, allowing your product engineering, manufacturing, and 3D measurement teams to easily access and share product definition and 3D measurement data and boosting the performance of your quality assurance processes.

Universal digital access to CAD and 3D measurement data

Our PLM connectors minimize the risk of mistakes and eliminate time loss resulting from manual data exchanges by ensuring a perfect digital interoperability between your PLM and 3D measurement ecosystems.

Import CAD data stored in the PLM directly into PolyWorks®

Search for CAD models and assemblies stored in the PLM from PolyWorks|Inspector™ and directly import any revisions.

Access 3D measurement data and results from the PLM

Inject hyperlinks into the PLM items of single parts or assemblies and access their associated 3D measurement data and results in a single click.

Digital PLM processes boosted by 3D measurement data

Accelerate new product development and improve product quality proactively by integrating valuable 3D measurement data into your digital PLM enterprise processes.

Engineering change

Access 3D measurement data easily from the PLM to troubleshoot design and manufacturing issues and check on the success or failure of a fix.

Revision traceability

Document the cause of engineering changes through hyperlinks that point to relevant 3D measurement data and discussion threads.

Approval process optimization

Improve the efficiency of existing PLM-based approval processes by linking CAD revisions to their corresponding 3D measurement data.

Continuous improvement

Analyze your enterprise's current manufacturing process capability to improve the next product designs.

Corporate Headquarters:

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