**Value Description**

Quadri

Quadri - your Common Data Environment Platform

Quadri is a collaboration platform for infrastructure projects. It allows real-time collaboration in a central model, where you keep track of changes and access the model from anywhere, at any time and in any project, using your favourite design tool.

With Quadri you are in a multiuser & model environment where you can collaborate seamlessly across company, domains and international borders and across geographical locations. This Common Data Environment gives you access to different information across the participants in a project.

The GIS world has taught us how to map the world in a unified way and how to describe the relation between real-world objects. With Quadri we combine the power and knowledge of GIS with the geometric complexity of volume objects from CAD/BIM needed for construction. When information is stored in a unified and structured, ISO standard based way as in Quadri - multiple stakeholders can run their information take off: extracting volumes and export to open formats like IFC/LandXML based on geographical location. For a contractor this means extracting the last version of all constructible data, from one platform and in a unified way.

Lifecycle management of infrastructure assets requires a strong ISO standard based data model and a transportation network technology as it's backbone. This is another one of the unique strengths of Quadri - bringing designers, owners and contractors together in one platform.
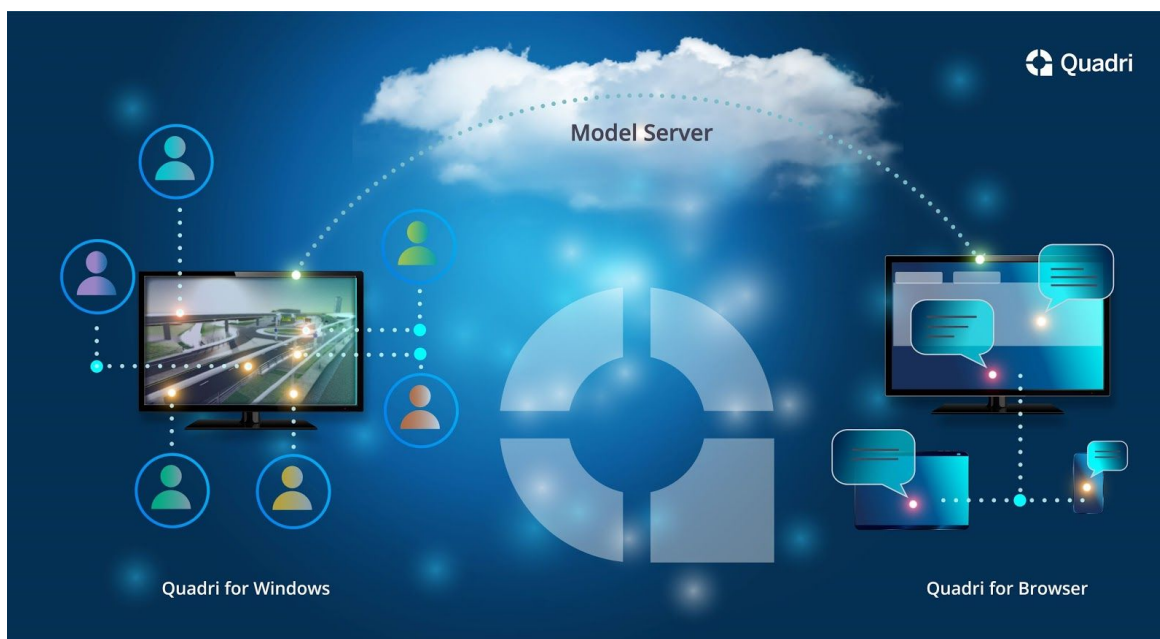
Quadri platform and workflow

Quadri acts as a core model production platform, where users may use design applications from different vendors, collaborating by continuously sharing models in a multi-user BIM environment. To get data from Quadri to the design software, you select or make a query for the needed data. The data you need are reference data for your design. The reference data you get, are result data from other softwares. You create your design in your software, which then will be located correctly based on the reference data. When you have finished your design, you send back the resulting data to Quadri in order to see your design in the context of the entire project. When you do changes in your design later on in the project - queries will help you get the latest version of reference data. You can also import & export data using open file formats like IFC, LandXML, GML or native files from different softwares.

When you exchange data to and from Quadri with other softwares or file formats, the data is mapped into Quadri features with their properties. Quadri features are defined in a configurable feature catalogue that holds the definition for the physical & non physical objects you need in your project. Data from different sources can be mapped to the same feature type definitions. This helps you to automate the use of data, present the data and querying and sorting the data for other downstream activities.

Quadri and model sharing

Quadri collects the results from multiple users on the server side. This is a "two button" system: receive and share. This helps you handle outgoing and incoming worksets. Organize your workset by reserving, releasing, sharing and receiving tasks in a workflow supported breakdown structure in a live updated collaboration model. The value of a secure, solid server side solution is a proven concept from both GIS and other larger systems. This gives the flexibility to work independently from each user and their files.

Quadri for Windows

Quadri for Windows is the desktop application that provides functionality for collaborating, using Quadri models. You may work with your design offline and connect to the shared central model when you want to receive or share work. It enables you to collect and combine data by importing from open as well as native file formats, or by connecting to best-of-breed BIM tools. It is all controlled and monitored through the process tree, consisting of tasks, typically organised in a work breakdown structure. Quadri for Windows also supports collaboration using *Topics* - live updated model comments. Topics are compliant with issue tracking according to BuildingSmart Collaboration format BCF 2.0.

Quadri for Browser

Quadri for Browser gives you quick access to your projects for insight into the real time model for easy monitoring and project management. It has capabilities like viewing 3D presentations, collaboration using *Topics* and following the progress on who did what, and when.

Quadri Connectors and API:s

Quadri Connectors and APIs support the bi-directional workflow between Quadri and authoring applications from a number of vendors. They allow you to design in your preferred applications while collaborating in a project together with others. Among current Quadri Connectors you find those that connect directly to tasks inside the model, such as the connectors for SketchUp, Civil 3D and Revit, and others that connect as file repositories, such as ProjectWise. In addition there´s a Quadri task connector API available for building your own connection, customizing Quadri to your needs.

Quadri & Trimble Connect for total asset management in projects

With Quadri & Trimble Connect together, you get total asset management in projects. Quadri provides model and issue management. Trimble Connect gives you folder and file data management and takes care of the necessary revision and version handling of files in projects. When working with files, Trimble connect works as the inbox to, - and outbox from Quadri for delivery to construction. You can easily provide ready-made chunks of data available on web, tablet or as Augmented Reality.