OmniConnect® API
Application Programming Interface (API) for Real-Time eClinical Data Exchange

OmniConnect is an application programming interface (API) conforming to the REST (Representational State Transfer) style architecture. The OmniConnect API is based on an extended CDISC ODM (Operational Data Model) dataset and allows for the exchange of clinical data seamlessly and in real-time between TrialMaster® and other eClinical solutions.

The use of REST web services in the API is the first of its kind in the industry. OmniConnect brings together complex clinical trial management functionality with our TrialMaster EDC solution in a single, integrated database. By receiving a consistent stream of data, TrialMaster enables sponsors and sites to take advantage of real-time integration of disparate information and data sources.

OmniConnect can be used to interface to IVR/IWR randomization and patient management systems to pass the patient enrollment information to TrialMaster, while passing the drug administration information back to the drug supply management system providing a real-time interface.

OmniConnect can be used to interface to ePRO systems to provide a centralized data repository for all patient data, including patient reported outcomes, and other clinical data for a study. The ePRO data can be transferred to the TrialMaster database in real-time or on a schedule.

OmniConnect can be used to provide the clinical data from the TrialMaster database to study management systems and central global portals and reporting systems to deliver an in-stream, holistic view of study status to sponsors and CROs.
Key Features

- Use of REST (Representational State Transfer) Web Services based on an extended CDISC ODM (Operational Data Model) dataset.

- 32 REST services are available for exchange of eClinical data as an interface to external systems. The TrialMaster OmniConnect Web Services may be used by external systems to push data to the TrialMaster database via HTTP PUT or for data retrieval from external systems via HTTP GET.

- The TrialMaster API system architecture is service based supporting asynchronous operations. The process manager is responsible for orchestrating the completion of each request.

- The REST service facilitates access to the data provided in an ODM format.

- Secure access is provided by the API URL using a defined user name, password and trial group.

- Data is available for the study, site, patient, visit, form, group, item and codelists, in addition to the clinical data, and data management information.

- Using the TrialMaster OmniConnect API, the study structure meta data can be extracted.

Key Benefits

- State of the art technology, and follows OmniComm’s continued focus on interoperability and standards to provide value based solutions.

- The available services may be used for various tasks for integrating systems to the central TrialMaster solution. These include transferring data for patient enrollment, visit information, ePRO (patient reported outcomes), drug administration etc.

- The TrialMaster OmniConnect web services provide real-time exchange of clinical data, making the data sent or retrieved available immediately for processing.

- Using industry standard protocols for data exchange.

- Access to the clinical data is secure and provided from a validated study environment.

- Both meta-data and clinical data can be exchanged using the OmniConnect API. This information can include clinical data points, query statuses, etc.

- Using a single REST request, the entire study can be extracted to a CDISC ODM file.
Case Studies
Using the OmniConnect® API

Connecting Randomization Systems

Patients can be randomized for a study at the clinical site using TrialMaster directly or can be randomized using interactive voice/web response (IVR/IWR) technology.

Using TrialMaster OmniConnect, as the patients are randomized, the data collected, such as treatment groups, demographics etc., is passed immediately to the TrialMaster database and stored with the central eClinical data. The site can access this data using the TrialMaster system. The data are integrated allowing for complete data exports for submission and analysis.

Connecting CTMS and Clinical Portals

Enrollment data, drug administration data, adverse events, concomitant medications, visits etc. is collected using the TrialMaster eClinical system. This data can be surfaced using the reports and exports available from TrialMaster.

Alternatively if sponsors / CROs etc. are accessing study metrics and reports in a study portal, and/or using a CTMS, Using TrialMaster OmniConnect, the study information is passed immediately to the Portal and/or CTMS for immediate access by the sponsor / site / CRO etc.

Connecting ePRO for Patient Reported Outcomes

Patient Reported Outcomes are becoming an increasingly important and substantial part of the clinical data collected in a study. There are many ways to collect this data directly from the patients, whether by a hand-held device, IVR, IWR, paper questionnaires and diaries, or other electronic means.

Once the data is collected, Using TrialMaster OmniConnect, this data is retrieved into the TrialMaster database. This process ensures that data integrity is maintained, and is only entered once. The data are integrated allowing for complete data exports for submission and analysis.

Connecting Drug Supply Systems

During the course of the study, patients are enrolled, have study drug administered and the disposition of the patient is tracked.

The information about the patient and the study drug use data is collected. Using TrialMaster OmniConnect, this data is passed to the drug supply management system, to manage the drug supply forecasting, supply and reconciliation. This process ensures that the data is accurate and received in a timely manner.
Global Presence

OmniComm EDC technology has been chosen in over 3,000 clinical trials, been used in over 50,000 sites, in over 50 countries, across 6 continents, with global customer support provided in 13 languages.

OmniComm’s U.S. headquarters is located in Fort Lauderdale, FL, and European headquarters in Bonn, Germany, with satellite offices in New Jersey and the United Kingdom, and sales offices throughout the U.S. and Europe.

OmniComm is a truly global provider of EDC and eClinical solutions capable of serving organizations conducting life-saving clinical trial research of any size or scale virtually anywhere around the world.