





Recording and transferring data from lab equipment can be cumbersome, time-consuming, and error-prone. Meanwhile the large variety of instruments and data formats only adds complexity. Managing instrument data in separate logbooks prevents scientists from optimizing their lab work based on the information of the required equipment.

BIOVIA Equipment is a comprehensive application for automated instrument data acquisition and the management of instrument-related data and workflows. It provides scientists with easy and intuitive transfer of instrument data into experiments in an Electronic Lab Notebook (ELN) like BIOVIA Workbook or BIOVIA Notebook, or to other lab informatics applications such as BIOVIA Capture and BIOVIA Task Plan. BIOVIA Equipment can be configured to automatically parse data from instrument data files to make results available when the scientist needs them. Auto-mapping of measurements to samples makes the import of results easy for the scientist and reduces transcription errors. Additionally, metrology checks performed directly from BIOVIA Capture makes lab workflows efficient and reliable.



BIOVIA Equipment provides a comprehensive set of capabilities related to the recording of instrument-related data and workflows. At the core of BIOVIA Equipment are the equipment registry, measurement store, reference data taxonomies and metrology.

- The equipment registry is the listing of all equipment used with the system. The registry can be fed from external master data systems such as Maximo or Blue Mountain. The registry includes information about the types of measurements instruments can provide, how to parse it, and where to find that equipment's data. Metrology information - the information about instrument maintenance and calibration - can also be tracked for each equipment enabling system checks of verification and calibration status.
- The measurement store is a central repository of measurements that have been acquired and parsed from BIOVIA Equipment. New measurements are ready for use in experimental records (for example in BIOVIA Capture or BIOVIA Task Plan). Logbook audit trails are kept for the use of measurements to ensure traceability of the data from the instrument to the experimental record.
- BIOVIA Equipment supports industry-standard reference data terminology including Allotrope ontologies and vocabularies. Standardization of measurement and result terms improves the quality of data and is important for data re-use and later analysis.
- Metrology events can be managed in BIOVIA Equipment. Verification metrology events can be linked to BIOVIA Compose recipes that are executed in BIOVIA Capture. Metrology checks during recipe execution can automatically launch verification recipes making it easy and convenient for the scientist to ensure the equipment is in a valid state for data collection

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62895 (Milford Balance 1) Admin and Settings > Equipment > 62895 (Milford Balance 1)		Edn	History Logbook Life Cycle *
Metrology General Components	Equipment Events		
	Add unscheduled maintenance for this equipment:		
	Daily Calibration Calibration		
	Method:	Expiration: 2019-Mar-20	GMP: No
	Last Performed: 2019-Mar-19 10:00 AM	Last Technician: metUser, metUser	Event Outcome: Pass
	Remarks:		
	Run, Edit		

BIOVIA Equipment includes comprehensive metrology capabilities, providing users with an overview of events and allowing them to perfume scheduled as well as unscheduled maintenance of the equipment.

INSTRUMENT INTEGRATION

BIOVIA Equipment is designed to support integration with external master data systems. The equipment registry can track the ID of the equipment in the external system to facilitate updates of asset and metrology status. Customers often implement regularly scheduled jobs to synchronize the external system using BIOVIA Equipment's REST-based APIs.

BIOVIA Equipment works with many types of instruments by allowing for different ways of transferring data:

- Direct result transfer from simple equipment such as balances, pH meters, etc. (requires TCP/IP network connection)
- File transfer of equipment that outputs result files. Acquisition and parsing of this data is automated via directory crawling and parsing jobs
- Data transfer of Web service-based equipment such as Waters[®]
 Empower[®] and Thermo Fisher Scientific[®] Chromeleon[®]

SYSTEM INTEGRATION

BIOVIA Equipment integrates with all laboratory information applications of BIOVIA such as Workbook, Notebook, Compose, Capture and Task Plan. This enables a seamless experience for scientists with automated instrument data acquisition and an integrated overview of instrument readiness for their experiments.

CAPABILITIES

- Manage registry of equipment including metrology status
- Automatically acquire and parse equipment data for later use
- Easily bring equipment measurement data into the scientist's experiment session
- Maintain traceability of equipment data from the source to the system where data are recorded or consumed
- Track metrology events including required preventative maintenance, calibration and verification events
- Link metrology events to methods and recipes like in BIOVIA Capture to ensure the correct procedure is followed
- Audit trail for all equipment records
- Electronic logbook of equipment use and metrology events

BENEFITS

- Achieve data integrity and veracity through direct traceable data transfer
- Increase productivity by eliminating manual data transfer
- Improve data quality by eliminate transcription errors
- Eliminate the need for 2nd scientist verification of manually entered data
- Align with industry standard ontologies and taxonomies for data consistency and quality
- Rely on valid state of equipment used by metrology checks during recipe execution

BIOVIA Equipment is part of BIOVIA's larger Unified Lab Management offering with a comprehensive set of lab informatics capabilities for lab planning and scheduling, resource and recipe management, lab execution and reporting and analytics.



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