



### This is eve®

eve® is able to do more than just plan, control and analyse your bioprocesses. The eve® software integrates workflows, devices, bioprocess information and big data in a web-based platform that lets you organise your projects – no matter how complex they are.







#### eve® unifies bioprocesses. All of them.

eve® integrates bioreactors, shakers, analytical instruments, and bioprocess data of all kind – regardless of the manufacturer – using cutting-edge NoSQL technology instead of traditional SQL. eve® catapults your bioprocesses into the world of big data, giving you information centrally, uniformly and quickly.



# Everything for your modern bioprocess.

eve® is as suitable for researchers as it is for users in industry. Select the features that make your life easier: draft bioprocess strategies in an astonishingly easy process – a few clicks is all it takes. Generate more information thanks to soft-sensors, and use DoE methods for faster results. It's up to you how you want to work with eve®.



# Unlimited and independent: web-based.

Because eve® is web-based, your bioprocess data are available for you right from a browser, ending your dependence on operating systems – one central installation is all you need. eve® adapts to your needs. Everywhere, unlimited and independent.



# All-inclusive workflow: from planning to data analysis.

eve® covers every aspect of a bioprocess, with a straightforward user navigation system that keeps the workflow on hand at all times. The workflow integrates all of the experimental requirements, from project, experiment and batch planning to resource administration and analysis of the results. Process Management becomes comprehensive and easier than ever before.



# Organised and packed with bioprocess expertise.

eve® gives you precisely the tools and information you need for your work sequences. Its integrated, expandable libraries organise information about process data, organisms, media, soft-sensors and formulations. Your bioprocess expertise is organised in a central location, easy to expand and available whenever you need it.



#### eve® is reliable and secure. Always.

Start up your computer and eve® is ready to go for as long as the computer is running. Your bioprocess will be recorded in the background, even if no user is logged in. After a power failure, eve® will automatically start up as soon as the computer is turned back on. You can depend on eve®. Always.

### Everything for your modern bioprocess

The intersection of software engineers, bioprocess experts and user experience specialists is at the heart of the eve® development process. This approach ensures that you will be able to operate eve® intuitively, even as we update features on an ongoing basis. The full range of bioprocess applications will always be right at your fingertips – instead of searching for features, you can go ahead and get started.

#### eve® is available in three packages:

#### eve® Basic

With eve® Basic you can take the first steps to digitalization of your bioprocess with a reasonable budget. The comprehensive functions for planning, monitoring and documenting batches are ideally suited for experiments in the shaker or simple applications in the bioreactor.

#### eve® Standard

eve® Standard provides you with the tools to control and automate bioprocesses. In addition to the comprehensive features with which you can plan, control, monitor and document batches, predefined functions, among others, which you can individually adjust are available to you.

#### eve® Premium

eve® Premium is suitable for work in the validated environment according to FDA CFR 21 Part 11. In addition to the comprehensive options for planning, controlling, monitoring and documenting bioprocesses, you receive additional safety features as well as validation documents for the software (FS, IQ, declaration of conformity).

#### eve® supports the following systems

- All INFORS HT bioreactors, as well as the Minitron and Multitron shakers
- Sartorius DCU
- Applikon in-/ez-/my-Control
- Devices meeting the OPC or Modbus standard
- Software with Rest API (Matlab, etc.)

Contact us and we'll be happy to advise you.

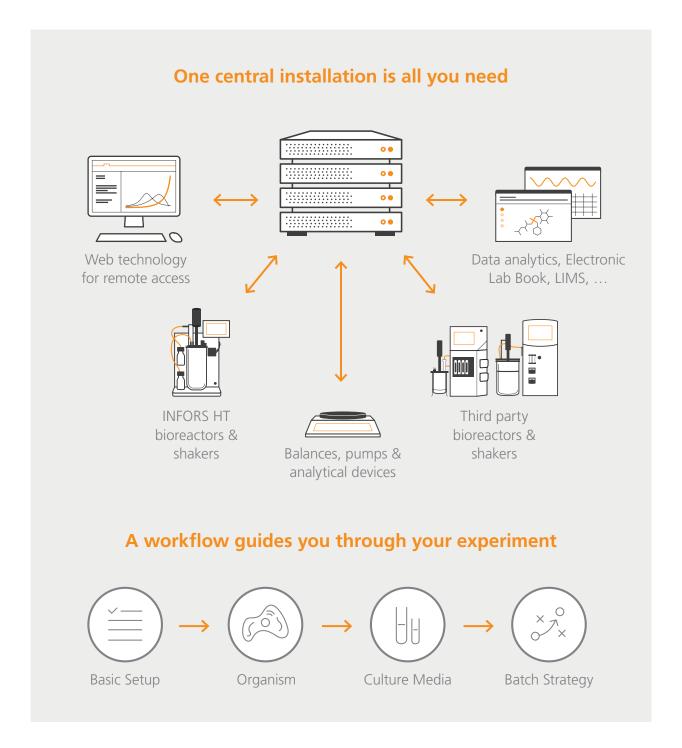
www.infors-ht.com/en/eve

## Features

### **Choose your package**

Monitoring   Satch data equisition and storage in a centralized database		Basic	Standard	Premium
Advanced configurable charting  / / / / Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm  / / / / Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm  / / / / Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm  / / / / Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm  / / / / Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm  / / / / Batch locates access  Sample data management  / / / / Batch control  Setpoint remote control  Batch control strategy with  - Phase system incl. configurable transition conditions  - Preconfigured function (linear, exponential steps)  - Carametric feeding (exponential, polynomial, profile)  - Scripting capabilities  - Carametric feeding (exponential, polynomial, profile)  - Scripting capabilities  Batch report including meta data, parameter, parameter chard, recipe, audit trail,  - Carametric feeding (exponential, polynomial, profile)  - Carametric feeding (exponential, polynomial, profile)  - Carametric feeding fexponential, polynomial, profile  - Carametric feed				
Unlimited remote access via web browser  Attributed system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and fixed ranges and e-mail batch alarm  Attributed values with visual alarm, dynamic and compounds  Attributed values with visual alarm, dynamic and compounds  Attributed values with visual values and values valu	Batch data acquisition and storage in a centralized database	✓	✓	✓
Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm / / / / / / Data libraries for batches, recipes, organisms, culture media and compounds / / / / / / Multi-user access / / / / / / / Multi-user access / / / / / / / Multi-user access / / / / / / / / Control Standard amanagement / / / / / / / Control Standard amanagement / / / / / / / Stappile data management / / / / / / Stappile data management / / / / / / / Stappile data management / / / / / / Stappile data management / / / / / / Stappile data management / / / / / Stappile media tonotic strategy with - Phase system incl. configurable transition conditions - Preconfigured function (linear, exponential steps) - / / / Grawnetric feeding (exponential, polynomial, profile) - / / / Grawnetric feeding (exponential, polynomial, profile) - / / / Scripting capabilities - / / / / Reporting Batch report including meta data, parameter, parameter chard, recipe, audit trail, - / / / / Reporting Batch report including meta data, parameter, parameter chard, recipe, audit trail, - / / / / Reporting PDF or MS Office - / / Audit trail reporting with selection of time frame, user or event filter, - / / / Auditail resporting with selection of time frame, user or event filter, - / / / / / / / / / / / / / / / / / /	Advanced configurable charting	✓	✓	✓
Calculated values with soft-sensor	Unlimited remote access via web browser	✓	✓	✓
Data libraries for batches, recipes, organisms, culture media and compounds	Batch & system alarm with visual alarm, dynamic and fixed ranges and e-mail batch alarm	✓	✓	✓
Multi-user access         V         V           Sample data management         V         V           Setpoint remote control         -         V         V           Batch control strategy with         -         V         V         V           - Phase system incl. configurable transition conditions         -         V </td <td>Calculated values with soft-sensor</td> <td>✓</td> <td>✓</td> <td>✓</td>	Calculated values with soft-sensor	✓	✓	✓
Sample data management	Data libraries for batches, recipes, organisms, culture media and compounds	✓	✓	✓
Control         Common terms of control strategy with         Common terms of co	Multi-user access	✓	✓	✓
Setpoint remote control Batch control strategy with Phase system incl. configurable transition conditions Pagnotring (exponential, polynomial, profile) Pagnotring capabilities Pagnotring capabilities Patch report including meta data, parameter, parameter chard, recipe, audit trail, Pactor in PDF or MS Office Pactor in PDF or MS Office Pagnotrin PDF or MS Office Pagnotri	Sample data management	✓	✓	✓
Batch control strategy with  Phase system incl. configurable transition conditions Preconfigured function (linear, exponential steps) Preconfigured function (linear, exponential steps) Preconfigured function (linear, exponential, polynomial, profile) Preconfigured function (linear, exponential, polynomial, profile) Profit profits Profit profits Batch report including meta data, parameter, parameter chard, recipe, audit trail, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office  Audit trail reporting with selection of time frame, user or event filter, Paport in PDF or MS Office Paport in PDF or MS Off	Control			
- Phase system ind. configurable transition conditions         - /	Setpoint remote control	_	✓	✓
− Preconfigured function (linear, exponential steps)         −         ✓	Batch control strategy with			
Grainwinteric feeding (exponential, polynomial, profile)         -         √         ✓           Reporting capabilities         -         √         ✓           Report in report including meta data, parameter, parameter chard, recipe, audit trail,         √         ✓         ✓           export in PDF or MS Office         √         ✓         ✓           System		✓	✓	✓
Scripting capabilities	– Preconfigured function (linear, exponential steps)	_	✓	✓
Reporting Bath report including meta data, parameter, parameter chard, recipe, audit trail, export in PDF or MS Office Audit trail reporting with selection of time frame, user or event filter, company to PDF or MS Office  System Integrated backup/restore Integrated backup/resto	– Gravimetric feeding (exponential, polynomial, profile)	_	✓	✓
Batch report including meta data, parameter, parameter chard, recipe, audit trail, export in PDF or MS Office  System  Integrated backup/restore  Integrated	– Scripting capabilities	_	✓	✓
Export in PDF or MS Office	Reporting			
Audit trail reporting with selection of time frame, user or event filter, export in PDF or MS Office  System  Integrated backup/restore Integrated b	Batch report including meta data, parameter, parameter chard, recipe, audit trail,	✓	✓	✓
Export in PDF or MS Office         System         Integrated backup/restore       V V V         Integrace with 3rd party software (REST API)       V V       V         Automatic restart after power failure       V V       V         Automatic logout (configurable)       V         Automatic password expiration       V         Lockout on failed logins       V         High complexity passwords       V         If white list for batch control restriction       V         Validation documents       V         Functional specification (FS)       V         Declaration of conformity (FDA CFR 21 Part 11)       V         Declaration of conformity (FDA CFR 21 Part 11)       V         Declaration of conformity (FDA CFR 21 Part 11)       V         Declaration of conformity (FDA CFR 21 Part 11)       V         Upcaration apualification protocol (IQ)       V         Operational qualification protocol (IQ)       V         Declaration of conformity (FDA CFR 21 Part 11)       V         Experimental qualification (OQ)       V         Declaration of conformity (FDA CFR 21 Part 11)       - V         Up to 100 supported process units       V       V	export in PDF or MS Office			
System   Integrated backup/restore		✓	✓	✓
Integrated backup/restore	export in PDF or MS Office			
Interface with 3rd party software (REST API)  Automatic restart after power failure  Automatic logout (configurable)  Automatic password expiration  Cockout on failed logins  Cockout on faile logins  Cockout on failed logins  Cockout on faile logins  Cockout on faile logins  Co	System			
Automatic restart after power failure  Automatic logout (configurable)  Automatic password expiration	Integrated backup/restore	✓	✓	✓
Automatic logout (configurable)	Interface with 3rd party software (REST API)	✓	✓	✓
Automatic password expiration	Automatic restart after power failure	✓	✓	✓
Lockout on failed loginsHigh complexity passwordsIP white list for batch control restrictionValidation documentsFunctional specification (FS)Declaration of conformity (FDA CFR 21 Part 11)Declaration of conformity (EU GMP Annex 11)Installation qualification protocol (IQ)Operational qualification (OQ)But to 100 supported process units√√√Valuabase management via NoSQL - ElasticSearch√√√Supported server operating system Windows 10 pro, Windows 2016/2019 Server√√√1 year free maintenance (free updates)√√√Service & training***Validation service*Additional driver*Modbus RTU/TCP***DCU (Sartorius)***ADI (Applikon)***Balances (Mettler, Ohaus, Kern, Sartorius)***	Automatic logout (configurable)	_	_	✓
High complexity passwords         −         −         ✓           IP white list for batch control restriction         −         −         ✓           Validation documents           Functional specification (FS)         −         −         ✓           Declaration of conformity (FDA CFR 21 Part 11)         −         −         ✓           Declaration of conformity (EU GMP Annex 11)         −         −         ✓           Installation qualification protocol (IQ)         −         −         ✓           Operational qualification (OQ)         −         −         ~           General         Up to 100 supported process units         ✓         ✓         ✓           Database management via NoSQL − ElasticSearch         ✓         ✓         ✓           Supported server operating system Windows 10 pro, Windows 2016/2019 Server         ✓         ✓         ✓           Service & training         √         ✓         ✓         ✓           Service & training         √         ✓         ✓           Validation service         −         −         −         ∞           Additional driver         √         ✓         ✓         ✓           Modbus RTU/TCP         ×         ×         ×	Automatic password expiration	_	_	✓
P white list for batch control restriction	Lockout on failed logins	_	_	✓
Validation documents Functional specification (FS)		_	_	✓
Functional specification (FS)	IP white list for batch control restriction	_	_	✓
Declaration of conformity (FDA CFR 21 Part 11)Declaration of conformity (EU GMP Annex 11)Installation qualification protocol (IQ)Operational qualification (OQ)*GeneralUp to 100 supported process unitsDatabase management via NoSQL - ElasticSearchSupported server operating system Windows 10 pro, Windows 2016/2019 ServerService1 year free maintenance (free updates)Service & training***Validation serviceAdditional driverModbus RTU/TCP***OPC***DCU (Sartorius)***ADI (Applikon)***Balances (Mettler, Ohaus, Kern, Sartorius)***	Validation documents			
Declaration of conformity (EU GMP Annex 11)Installation qualification protocol (IQ)Operational qualification (OQ)*GeneralUp to 100 supported process unitsDatabase management via NoSQL - ElasticSearchSupported server operating system Windows 10 pro, Windows 2016/2019 ServerService1 year free maintenance (free updates)Service & training***Validation service*Additional driverModbus RTU/TCP***OPC***DCU (Sartorius)***ADI (Applikon)***Balances (Mettler, Ohaus, Kern, Sartorius)***	Functional specification (FS)	_	_	✓
Installation qualification protocol (IQ)	Declaration of conformity (FDA CFR 21 Part 11)	_	_	✓
Operational qualification (OQ)*GeneralUp to 100 supported process units✓✓✓Database management via NoSQL - ElasticSearch✓✓✓Supported server operating system Windows 10 pro, Windows 2016/2019 Server✓✓✓ServiceVariet e maintenance (free updates)✓✓✓Service & training****Validation service*Additional driverAdditional driverModbus RTU/TCP****OPC****DCU (Sartorius)****ADI (Applikon)****Balances (Mettler, Ohaus, Kern, Sartorius)***		_	_	✓
GeneralUp to 100 supported process units///Database management via NoSQL – ElasticSearch///Supported server operating system Windows 10 pro, Windows 2016/2019 Server///Service/1 year free maintenance (free updates)///Service & training***Validation service*Additional driverModbus RTU/TCP****OPC****DCU (Sartorius)****ADI (Applikon)****Balances (Mettler, Ohaus, Kern, Sartorius)***	Installation qualification protocol (IQ)	_	_	✓
Up to 100 supported process units  Database management via NoSQL – ElasticSearch  Supported server operating system Windows 10 pro, Windows 2016/2019 Server  Service  1 year free maintenance (free updates)  Service & training  * * * *  Validation service  Additional driver  Modbus RTU/TCP  Modbus RTU/TCP  * * *  DCU (Sartorius)  ADI (Applikon)  Balances (Mettler, Ohaus, Kern, Sartorius)  * * * *  **  **  **  **  **  **  **	Operational qualification (OQ)	_	_	*
Database management via NoSQL – ElasticSearch Supported server operating system Windows 10 pro, Windows 2016/2019 Server  Service  1 year free maintenance (free updates) Service & training  * * * *  Validation service  Additional driver  Modbus RTU/TCP  OPC  DCU (Sartorius)  ADI (Applikon)  Balances (Mettler, Ohaus, Kern, Sartorius)	General			
Supported server operating system Windows 10 pro, Windows 2016/2019 Server  Service  1 year free maintenance (free updates)  Service & training  **  Validation service  Additional driver  Modbus RTU/TCP  OPC  DCU (Sartorius)  ADI (Applikon)  Balances (Mettler, Ohaus, Kern, Sartorius)	Up to 100 supported process units	✓	✓	✓
Service           1 year free maintenance (free updates)         ✓	Database management via NoSQL – ElasticSearch	✓	✓	✓
1 year free maintenance (free updates)  Service & training  *  Validation service *  Additional driver  Modbus RTU/TCP  *  OPC  DCU (Sartorius)  ADI (Applikon)  Balances (Mettler, Ohaus, Kern, Sartorius)	Supported server operating system Windows 10 pro, Windows 2016/2019 Server	✓	✓	✓
Service & training         *         *         *           Validation service         -         -         *         *           Additional driver         *         *         *         *           Modbus RTU/TCP         *         *         *         *           OPC         *         *         *         *           DCU (Sartorius)         *         *         *           ADI (Applikon)         *         *         *           Balances (Mettler, Ohaus, Kern, Sartorius)         *         *         *	Service			
Validation service         -         -         *         *           Additional driver         -         -         -         -         *	1 year free maintenance (free updates)	✓	✓	✓
Additional driver         Modbus RTU/TCP       * * * *         OPC       * * * *         DCU (Sartorius)       * * * *         ADI (Applikon)       * * * *         Balances (Mettler, Ohaus, Kern, Sartorius)       * * * *	Service & training	*	*	*
Modbus RTU/TCP         *         *         *           OPC         *         *         *           DCU (Sartorius)         *         *         *           ADI (Applikon)         *         *         *           Balances (Mettler, Ohaus, Kern, Sartorius)         *         *         *	Validation service	_	_	*
OPC         *         *         *           DCU (Sartorius)         *         *         *           ADI (Applikon)         *         *         *           Balances (Mettler, Ohaus, Kern, Sartorius)         *         *         *	Additional driver			
DCU (Sartorius)       *       *       *         ADI (Applikon)       *       *       *         Balances (Mettler, Ohaus, Kern, Sartorius)       *       *       *	Modbus RTU/TCP	*	*	*
ADI (Applikon) * * * Balances (Mettler, Ohaus, Kern, Sartorius) * * *	OPC	*	*	*
Balances (Mettler, Ohaus, Kern, Sartorius) * * *	DCU (Sartorius)	*	*	*
	ADI (Applikon)	*	*	*
	Balances (Mettler, Ohaus, Kern, Sartorius)	*	*	*
	Pumps (Ismatec, Watson Marlow)	*	*	*

### This is how it works



#### We always find the right solution for you

Communications protocols for eve® are constantly being expanded. To help make your project a success, we integrate your bioprocess equipment and review every customer request in a feasibility study. Your INFORS HT representative would be happy to provide you with support for your project.

