

ReleaseNote.txt

**
** JobManager
**
** for CyMek systems & ExpressionFactory / ExpressionWorkstation
**
** Version 3.1.0
**
** Released 11 March 2010
**

1. Thermocycler behaviour when the system is simulated (e.g. during validation) is improved, allowing jobs to be run without a JobManager re-start.
2. JobManager displays the source of each project in the project list, distinguishing orchestrator databases, file, or JobEditor.
3. Major overhaul of JobManager diagnostic logging - all logging moved from database to text files
4. XML input file rundate formats now include "yyyy/MM/dd" format.

PREVIOUS RELEASES:

** Version 3.0.4
**
** Released 28 January 2010
**

1. PCR - fix process summary if thermocycler program not provided.
2. PCR - do not load thermocycler lid if thermocycler program not provided.

** Version 3.0.3
**
** Released 25 January 2010
**

1. Add help files to user interface Help menu.
2. DaughterPlates - allow a PCR daughter plate to be fed by more than 1 parent plate.
3. Correction of DaughterPlates output model number.

** Version 3.0.2
**
** Released 11 December 2009
**

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1. Support for input plate barcodes and descriptions when job loaded from XML file

** Version 3.0.1
**
** Released November 2009

1. Project input XML embedded in output XML
(Note: version 3.0.0 is JobEditor release)

** Version 2.2.2
**
** Released February 2009

- EFR-3005: PlateReader Gen5 not loaded correctly in simulator, causing project validation failures.
- EFR-3003: Issue system flush after 24 hr inactivity.
- EFR-3002: System flush - aspirate-dispense use of PickSys. Ensures that system aspirates-dispense volumes correspond correctly.
- EFR-3001: Dispense airgaps parameter problem - bug calling new SIAS interface, fixed.
- WC-2998: Fix for timers not working when using flexible well groups or plates.

This release also fixes:

- Composer: Fix to prevent mutable programs only running in simulated mode.

This release also includes:

- Update of contact details from NextGen Sciences to eXeTek, including About box.
- Cell Harvest - increase minimum cell pellet height from 2.0 to 3.0
- ActiveRobot update from 1.4.63 to 1.4.64
- Composer: Update to sample Composer file "Birdfeeder to Plate.wpc" to use 96 wells.

Version 2.2.0 December 2008

WC-2998: When flexible well groups or plates are used the timers and prompt step do not work in a real run, they are skipped as if in simulation.- fixed

Version 2.2.0 October 2008

EFR-2995: Update to support new SIAS sdk (moves from version 0.1.8.8 to 0.2.2.4) First used on EW008

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Also compatible with older instruments provided latest version of X-AP is installed.

EFR-2996: Update to support Biotek plate reader running new GEN5 software (new device driver and config file changes)
Used on EF003
Support for KC4 software is retained

EFP-2994: Fix for bug in Inoculation and Growth on factory.
Simulation and validation failed if OD reading requested.
Fixed for I & G v2.0 (not I & G 3.0 because not yet supported by IMS)

WC-2997: Programs using flexible well groups or plates did not run for real but ran in simulation - fixed

Version 2.1.3 May 2008

Fix to config file error - door locks active flag instead of door locks enabled

Fix to smarttrough pump speed scaling error

Version 2.1.2 May 2008

EFR-2928: TRobot automatically re-initialised after power cycle on expressionworkstation (door opening).
Change reinstated from 2.0.8
Also applied after pauses, user prompts and out of tips.
Pauses during thermocycling or waits now disabled on expressionworkstation

Version 2.1.1 May 2008

EFP-2982: Job Manager log now included in output xml file temporarily reversed for this release

Version 2.1.0 May 2008

EFR-2954: Post dispense mix may not mix all wells - fixed

EFR-2981: Automatic email - Fix to unhandled errors and UI issues

EFR-2945: Tabs added to Job Manager allowing switching between commentary and project summary

EFR-2950: IMS project description now displayed on UI below name and ID

EWp-2956: Plasmid Miniprep - corrected plate positions - output plate now loaded onto chilled position, balance plate now on room temperature

EWP-2963 & EFP-2241: DNA purification - Support added for separate pre and post samples triggered by check boxes on IMS page

EWP-2958 & EFP-2959: QuikChange - Increased digestion wastage factor

EWP-2977 & EFP-2978: Protein purification speeded up by removing pipetting delay on transfer to filter plate

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when input volumes are small

- EWP-2957 & EFP-2952: Volume normalisation removed at start of native protein purification
- EWP-2962 & EFP-2946: The following EW processes now support use of pre made master mix triggered by check box on IMS page
- PCR (zeros not req. in master mix volumes)
 - Ligation
 - Quikchange
- WC-2985: Fixed to tip store location errors during simulation for flexible plates in Composer
- EWP-2983: Detergent lysis now displays offline instructions for incubation time (EW only)
- EFP-2982: Job Manager log now included in output xml file

This release also resolves the following issue:

- Fix to prevent airgap being taken twice during mix aspirate

This release also includes:

- Added print function for post run instructions (EW only)
- Added Job Manager version number to startup splash screen

Version 2.0.11 March 2008

- EWP-2975: Cell Harvest - Add optional mixing before transfer

Version 2.0.10 November 2007

- EWP-2930: Includes correct Protein Purification XML files in release set
- EFR-2931: Backup set now reduced in size (controlled by config file)
- EFR-2932: SystemState report now includes complete input and output XML data
- EFR-2933: The IMS server is now reported on the Poller Monitor tool tip
- EWP-2935: Fix to small typo in sample Protein Purification XML
- EFR-2937: Config updater that runs during installation now performs a system backup first
- EWP-2939: Klenow process - DNTPs not shown on screen in process details - added

Version 2.0.9 November 2007

Revert EColi Transformation change (2.0.7) -
re-instate original pre-chill mechanism

Version 2.0.8 October 2007

- EFR-2928: TRobot must be re-initialised after power cycle

Version 2.0.7 October 2007

- EWP-2925: EColi Transformation: Replace pre-chill 'Incubate' with 'Run Program'
- EWP-2900: ProteinPurification: Optional matrix binding duration specified from IMS, with up to 2 stirs calculated
- EWP-1471: New InFusion process (not available yet from IMS)

This release also resolves the following issues:

- EFR-2910: Improved Status and Error Reporting from EW Thermocycler
- EFR-2905: Ensure that workstation thermocycler exits correctly on JobManager close
- EFR-2899: Fix to handling of thermocycler init failure
- Fix to retry logic when run out of tips

Version 2.0.6 July 2006

- EF Thermocyclers now on RS232 not USB.
- WC-2864 & WC-2865: Composer issues: Problem with 300ml Troughs, and duplication of wells in output XML. Fixed.

Version 2.0.5 July 2006

- EW will now correctly accept more than 9 steps in the thermocycler program

This release also resolves the following issues in Composer:

- Corrections to the location and contents of installed sample programs folder and example CSV file folder
- Plasmid miniprep now wets correct wells before final vacuum elution
- Stirring timer now correct in Protein Purification Part 1

Version 2.0.4 29th May 2007

This release includes Composer as part of the Job Manager 2 install for workstations

This is a maintenance release resolving the following issues in Job manager:

- Correction to cabinet lamp status, now shows amber after user has dismissed the project
- Extra logging added for Liconics incubators on factory
- Correct error message raised if too many tip types found when validationg factory chain of processes

Additional functionality in provided in Job Manager with this release includes:

- 4 new EW processes
 - SAP Treatment
 - Klenow
 - Inoculation (& growth)
 - Induction (& expression)
- Support for post run instructions (used by some EW processes e.g. inoculation)
- Duration of thermocycler programs in commentary added to quikChange processv
- validation warning added if thermocycler program missing in PCR process

Additional functionality in provided in Composer with this release includes:

- Felxible plate contents and volumes including
 - user specified at start of run
 - import from CSV file
 - import from IMS
- Flexible well groups including
 - user spcified at start of run
 - based on plate contents
 - import from CSV file
- Linked well groups including
 - copy of single group
 - inverse of single group
 - AND of several groups
 - OR of several groups
- Sample processes added for the following processes (Composer versions of the Job manager process)
 - DNA Purification
 - Plasmid MiniPrep
 - Protein Purification (Part 1 and 2)
- User can now restrict types of cintainers to use with automatic reagent calculation
- Loading now give preference plates in near vac station positions over plates in normal positions

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This release also resolves the following issues in Composer:

- Vacuum seal breaking now works properly with vacuum waste
- Multiple goto loops now work correctly
- Commentary now correct for mix only steps

Version 2.0.3 30th April 2007

This is a maintenance release resolving the following issue:

EFR-2744 - JobManager locks up when starting run when the ExpressionFactory fans are turned off.

This was partly fixed in version 2.0.1 and is now fully resolved in this release.

Additionally support for displaying the duration of thermocycler programs in the commentary has been included. This has been added to the PCR process and will be added to other processes in future releases

Version 2.0.2 24th April 2007

This is a maintenance release resolving the following issues:

EFR-2745 - EF doors did not unlock nor did correct indicator lights show at end of run

Version 2.0.1 24th April 2007

This is a maintenance release resolving the following issues:

EFR-2743 - Installer overwrites registry settings

EFR-2744 - JobManager locks up when starting run when the ExpressionFactory fans are turned off

Version 2.0.0 24th April 2007

This is a major upgrade to JobManager, merging the source code trees of the ExpressionFactory and ExpressionWorkstation JobManagers into one.

Additional functionality provided with this release includes:

- Projects are now validated using a simulated run before project loading. This was previously only provided on the EW JobManager
- Automatic tip calculation is performed on processes. This was previously only provided on the EW JobManager.

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- If there is an error during tip pickup the project now pauses rather than stops, allowing the user to correct the problem.
- Pause events are now reported via email.
- Pauses can now occur in processes in
 - the middle of liquid handling operations
 - during thermocycler runs
 - during incubations and other waits
- The OrchestratorIMS poller monitor now reports the state of the link to OrchestratorIMS, not just the state of the poller service itself.
- The OrchestratorIMS poller monitor will now allow the user to switch between polling different OrchestratorIMS databases.
- There is now a Thermocycler service monitor, showing the state of the thermocycler service
- SQLServer2005 is now the local database service used
- 300ml troughs are now supported in EF processes
- On the ExpressionFactory, the user no longer loads full stacks of tips. The JobManager loading screens will indicate how many tip boxes are required for each stack.
- The KillAll utility should no longer be used to close the application, except under instruction from NextGen Sciences. There should be no further need to shut the JobManager down at all between runs.
- Projects in the project list can now be grouped by source-database or status
- Projects when selected in the project list will display a project summary, showing number of reactions, thermocycler programs, incubation times etc.
- Processes now have improved validation, which can now include warnings (such as missing thermocycler programs) which although displayed to the user before loading will not prevent the job from being run.
- The temperature of thermocycler(s) are now displayed during the run.
- The following processes now support controls and replicates:
 - PCR
 - Ligation
 - Restriction Digestion
 - E.Coli Transformation
 - Gateway
 - Inoculation & Growth
 - Induction & Expression
 - QuikChange
 - TOPO Cloning

Please note that not all version of OrchestratorIMS will have controls and replicates activated for these processes.

- A progress bar is displayed during the run. The progress

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bar position is indicative of how far 'though the logic' of the process, NOT how far through in duration, which may be misleading in processes which end with long incubations etc.

- Cell Harvest. The process XML can now contain a switch to inhibit the OD reading. This is currently not supported in OrchestratorIMS, but could be used in the future where the OD is not required (e.g. to harvest cells for a miniprep)
- Inoculation & Growth. A 'time of inoculation' result is now added to the container, and returned to OrchestratorIMS and attached to the aliquot.

The following major bugs have been fixed:

EFP-2740 : NA-Normalisation - the reaction concentration from OrchestratorIMS was being ignored

EFP-2741 : Detergent Lysis - incubation period was being interpreted as minutes and not seconds.

EFP-2742 : Inoculation & Growth - overestimated the number of tips required.

EFR-2766 : Return to amber light from amber light flash after project finished dialog is closed

Release note : Composer 2.0.4 - 15-05-07

Enhancements

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Added flexible plates.

Added flexible well groups.

Added linked well groups.

Added support for restricting containers in the automatic reagent calculation system.

Replaced execute tab with validation and execute dialogs.

Up-rated the pause resume mechanism to allow pausing during thermocycle and pipetting steps.

Added support for 300ml troughs.

Added the 'near vacuum station' hint for initial plate placement.

Added the vacuum seal breaking system. (to prevent sticking during long vacuum operations).

Increased speed of rendering of well controls to improve usability.

Now composer uses the JM2 loading mechanism.

Added a pipetting method override mechanism when aspirating from a birdfeeder.

Updated the plate contents dialog to make it more user friendly.

Bug fixes

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Corrected several spelling mistakes.

Added exit confirmation to menu exit command.

Fixed plate delete confirmation dialog.

Added a commentary message to a mix only pipetting step.

Corrected a bug with the pipetting method dialog when changing from single pipettor loading to multiple pipettor loading

Made support and error dialogs as modal.

Corrected a flaw in the workstation interface where under extreme circumstances the pipetting arms are crashed into the drop station.