Release Notes FE v12.1.1 (12.1.1.1)

Agilent Feature Extraction 12.1.1

Product Numbers

G2566AA - Feature Extraction provided with the Agilent Scanner

G4460AA - G4462AA - Feature Extraction Commercial License

G4463AA - G4465AA - Feature Extraction Academic License

- General Overview
- Changes in FE 12.1.1
- Fixes done in FE 12.1.1 from previous releases
- Known Issues FE 12.1.1 and earlier
- Known Issues in QC chart tool software 3.5.2.1

General Overview

- Feature Extraction can be installed by first downloading it from the Agilent web site.
- Previous versions must be uninstalled before installing a new version. Be sure to export any protocols that you would like to migrate into FE 12.1.1 before uninstalling a previous version of Feature Extraction. See the Migration Tool document.
- Refer to the Installation Guide for more details regarding the installation process.
- Contact Agilent Technical Support if you have any questions or problems with the installation of FE 12.1.1.

Enhancements in FE 12.1.1

None

Fixes to FE 12.1.1 from previous releases

- Previously implemented memory optimization changes in FE 12.1 allowed pre-defined protocol parameters to be used instead of parameters defined by the Agilent and customer protocols. This resulted in hard coded default values being used in calculations rather than the values defined in the FE protocol files. (TT 284364).

Points to Note Regarding FE results

- There has been a code enhancement related to Background Peak Shifting. This enhancement sometimes leads to FE v12.1.1 producing different results for non-Agilent scanned arrays, then those from earlier versions.

Known Issues FE 12.1.1 and earlier

- For non-Agilent provided PCs running Windows 10 v.1803 or later, you must install the Visual C++ 2008 Redistributable Package prior to the installation of Feature Extraction 12.1.1.1. This file (vcredist_x86.exe) is provided with the FE 12.1.1.1 installation package zip file that is available for download from the Agilent website.
- Calculation of background for non-Agilent scanned arrays may result in the possibility of receiving small differences in results. (TT 28564).
- Check grid placement Centroid calculation. One of the many conditions being used to determine if the grid is placed well is if (cart_diff_centroid) > *(m_dMaxCentroidDiffThreshold)*. This check happens in the 'Find Spot' step while the value for *(m_dMaxCentroidDiffThreshold)* is defined by the protocol in the 'Calculate Metrics' step. As the Find Spot step is the 2nd step and Calculate Metrics is the last step in FE extraction, when the check happens, the value for For Research Use Only. Not for use in diagnostic procedures. 3 FE 12.1 *(m_dMaxCentroidDiffThreshold)* remains the default value which is set to 10 (TT281983)
- Changing the color scale does not work while in grid mode. If the user attempts to change color scale from "All Channels" to "Red Channel" or "Green Channel" it does change (TT 2309).
- The eArray integration feature is not quite complete, in that after FE runs, the project explorer is not updated to reflect which grid template and protocol were automatically assigned. This can be confusing to a user after the project has finished as they do not get the feedback in the Project Explorer. User needs to right-click and select "Refresh" in the appropriate navigation panes to see the updated files (TT 2236).
- For new format scans while setting color ranges, the ability to adjust colors in high fidelity mode can lead to errors, namely if the user tries to set "Auto Scale Image" after unsetting this option (TT 2166).
- In rare instances, the Switch to Configure Mode button is not being enabled after the extraction is complete. The extraction must be closed and re-opened to enable the config / run mode toggle (TT 2069).
- The grid template that is currently in use during an extraction can be removed causing the extraction to fail (TT 2042).
- Attempting to calculate spot size and centroids in manual grid mode using a high-resolution scan of a third-party array will cause FE to crash (TT 2032).
- Projects containing multiple 30-micron feature size 1 million feature array will run out of memory if run directly using FENoWindows. The work around is to either use the FE

GUI to run these projects or to break up the project into multiple projects each containing 1 extraction (TT 2016).

- If the DBConnectInfo.ini file is removed from the FE installation folder, the software cannot be removed via the install or Add/Remove programs feature (TT 1944).
- When viewing shape files, feature outliers are not visible until the image is zoomed or cropped (which effectively zooms) (TT 1955).
- Viewing the scan properties can cause the image to appear distorted.
  Minimizing followed by reopening the image will correct the issue (TT 1959).
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- When a two-channel tiff file is split into two single-channel tiff files (one for Red and one for Green) from the Agilent Microarray Scanner, On-Time project treats the split tiff files as two separate single-channel files (TT 282).
- Cannot open a .tif image from a CDROM or DVD. Users need to copy the image to a hard disk or network share (TT 1463).
- In case of XDR images, if the user has both the images in extraction set, then the images will not be cropped. But if the user has any one image (i.e. Either <image>_H or <image>_L) then the images will be cropped. (TT 282285)
- While creating a Critical Probe list (and Dye Norm list), opening this UI can take a long time, especially for million-feature designs (TT 200107).
- Sometime an error is thrown when user tries to import a metric set in FE (TT 282185).

Known Issues in QC chart tool software 3.5.2.1

- Sorting table by ExtractionDate can overwrite names incorrectly. Sorting on ScanDate can cause those values to be deleted. Closing QC Tool and reopening fixes these issues (TT 200499).

- QC Tool Edit Metric Set has incorrect behavior. Second tab reads either "Selected Metrics" or "Existing metrics", depending upon some user choices (TT 177758).
- New Annotation Import needs additional import options (TT 178701).

- Data for the columns Author and Extraction Status are missing when user exports query result and imports it into the QC tool again. This happens if user exports a query result, opens the query result in Excel, creates a copy of any of the existing rows, modifies any of the fields except Author and Extraction Status, then imports it into the QC tool again. User sees the Author and Extraction Status fields as blank for the newly added row (TT 178855).

- Importing a query result changes, the order of the table columns (TT 179320).

- Query with operator not equal (<>) does not fetch correct results (TT 200429).

- On reimport, query records are not getting added correctly (TT 200431).

- Sometimes when importing query with the same Array ID and extraction name values as an existing query, the query is not overwritten (TT 200436).
- No error message is displayed when user imports an invalid file in 'Import FE statistics and parameters (TT 200438).