

| Number | Summary | Details | Topic | Type | Severity | Ticket # | Version Introduced | Versions Fixed |
|-----------|--|--|-------------|---------|----------|----------|--------------------|----------------|
| FFDC-9997 | Add support for ModBus function code 5 (write) | Allows writing coils | Connections | Feature | Minor | | | 21.04.02-a |
| FFDC-9993 | Allow multiple Tool PM designated Bins and allow a Bin analysis to be reset by multiple PMs | | General | Feature | Minor | | | 21.04.05-a |
| FFDC-9990 | Add chamber information when web shows logistics instead of sensors | | Web | Feature | Minor | 4471 | | 21.04.05-a |
| FFDC-9989 | Ability to edit Report display options in grid editor | | General | Feature | Minor | 4633 | | 21.09.03-a |
| FFDC-9987 | Optimize the number of time File importer checks for files | | Acquisition | Feature | Medium | | | 21.04.02-a |
| FFDC-9980 | Add New Tool Takatori AMR-2200G | | General | Feature | Minor | 4544 | | 21.04.02-a |
| FFDC-9979 | Add a choice of Stop Bits to Serial ModBus communication configuration | | Gauges | Feature | Minor | 4213 | | 21.04.02-a |
| FFDC-9978 | Add user name and security level to all print output | Show the user requesting to print below the title. | General | Feature | Minor | 4627 | | 21.04.01-a |
| FFDC-9973 | Oracle partition add job should use DBMS_SCHEDULER instead of DBMS_JOBS | | Database | Feature | Minor | 4616 | | 21.04.02-a |
| FFDC-9970 | Additional logistics for the IE calculated EPis | Added Cassette ID, Part ID, Layer ID, Technology ID, Extra4 ID, Extra5 ID, Extra6 ID, Extra7 ID, and Extra8 ID. | General | Feature | Minor | 4596 | | 21.04.01-a |
| FFDC-9964 | Add another input file format: Convert HTML format to SML format for Multiplexer SECS log files | Available from FabGuard Client Advanced menu. Choose a HTML file and it will covert the file to SML and put the new file with the same name, different extension .SML, in the same directory as the source.A HTML input file can be text-formatted or HTML-formatted. | General | Feature | Minor | | | 21.04.02-a |
| FFDC-9961 | RGA filament count based on Ion Source, not Genus | Only "Closed" source has 1 filament. "Open", "Grid" and "Cross Beam" sources have 2 filaments. | Sensors | Feature | Minor | 4600 | | 21.04.01-a |
| FFDC-9960 | Allow display of partial scans for PrismaPlus and QMG7xx RGAs | | Sensors | Feature | Minor | 4455 | | 21.04.01-a |
| FFDC-9958 | Reject Report application based on MES state | In Rejection tab on SPC reports, Reject based on MES State and need to choose what state (can have multiple choices): Unknown, Productive, Standby, Engineering, Down Scheduled, Down Unscheduled, Nonscheduled. | Analysis | Feature | Minor | 4552 | | 21.04.05-a |
| FFDC-9956 | Add more choices for which combination of FabGuard Alarms and Tool Alerts to retrieve in Reports | Added choices allow every previously selection of FabGuard Alarms to be retrieved with and without Tool Alerts. | General | Feature | Minor | | | 21.04.01-a |
| FFDC-9952 | In the Alarm type database filter do not show Alarms that cannot be generated | | Program UI | Feature | Minor | | | 22.01.00-a |
| FFDC-9951 | Send email from Executive when Clone or Restore is performed | Added an informational Alarm "FabGuard Executive Cloned/Restored a FabGuard Node" used by FabGuard Executive to configure an email addresses to receive Clone/restore notifications. | General | Feature | Minor | 4520 | | 21.04.01-a |
| FFDC-9949 | Make sure that levels are always shown on SPC plots by auto expanding the plot's Y axis | | Program UI | Feature | Minor | 4583 | | 21.04.01-a |
| FFDC-9948 | Global preference for maximum number of characters in placeholders for PROMIS HTTP output | | Program UI | Feature | Minor | 4554 | | 21.04.01-a |
| FFDC-9947 | Removing unused MI's from FabGuard Web Maintenance tab | Accessed using RMM > Advanced -> "Delete obsolete MI (will no longer be shown on the web)". | Web | Feature | Minor | 4210 | | 21.04.01-a |
| FFDC-9945 | Add New Tool EVG Gemini v2 | | General | Feature | Minor | 4525 | | 21.04.01-a |
| FFDC-9939 | Modify Tool Type Tokki OLED T4 v3 | | General | Feature | Minor | 4146 | | 21.04.01-a |
| FFDC-9938 | SECS DLL for Evatec Radiance (Peer Group) | Has output commands S2F41 PAUSE, STOP, and ABORT. Supports TOI using S2F41 PP-SELECT and START. | Connections | Feature | Minor | 4492 | | 21.04.01-a |
| FFDC-9932 | Add ability for a FabGuard Node to modify an Anomaly model based on a Run | Initiated from an API | Analysis | Feature | Minor | | | 21.04.05-a |
| FFDC-9931 | Add ability for a FabGuard Node to Suppress Anomaly model | Initiated from Active Analysis . | Analysis | Feature | Minor | | | 21.04.05-a |
| FFDC-9930 | Add ability for a FabGuard Node to automatically rebuild an Anomaly model based on a time range | From API. You may see it mentioned as Retrain as well. | Analysis | Feature | Minor | | | 21.04.05-a |
| FFDC-9923 | Show RF board position for RGA sensors in Hardware configuration dialog | Right angle or Straight are the values. | Sensors | Feature | Minor | 4512 | | 21.04.01-a |
| FFDC-9918 | Add greater control to global preference on when and how often a Fault is generated for EPis | Applies to EPis, Mis, Sis, etc. Applies when a new value is available and when a background check occurs. The choices are: "Every fault severity change or after minimum time", "Moderate: Once, Critical: Every fault severity change or after minimum time", "Moderate: Once, Critical: Once". Also, independently, the user can set minimum times between generated faults this global preference was always there. | Analysis | Feature | Medium | 4488 | | 21.04.01-a |
| FFDC-9917 | Use grid in "Database Get Choices" dialog | Faster display and ability to filter (search) the choices. | Program UI | Feature | Minor | 4404 | | 21.04.01-a |
| FFDC-9916 | Add New Tool ESPEC PVHC-232M | | General | Feature | Minor | 4472 | | 21.04.01-a |
| FFDC-9914 | SmartFDC UI 1.1.0 | | Web | Feature | Minor | | | 21.04.00-a |
| FFDC-9912 | Add RFC command for communication with Aera 78 series MFC | | Gauges | Feature | Minor | 4145 | | 21.04.00-a |
| FFDC-9909 | Allow up to 4096 Tool Bins in the Run | | Acquisition | Feature | Minor | 4500 | | 21.04.00-a |
| FFDC-9908 | Improve available memory check | Applies both to checking computer memory for the purpose of generating alarms, and to checking available memory for loading runs and database records. | General | Feature | Minor | 4465 | | 21.04.00-a |
| FFDC-9905 | Better organize Model menu | Make sure all menus show models in the same order. | Program UI | Feature | Minor | | | 21.04.00-a |
| FFDC-9904 | SECS DLL For Entrepix OnTrak D5S-200 Series2CE/Synergy | Has output command S2F41 PauseResume. | Connections | Feature | Minor | 4496 | | 21.04.01-a |
| FFDC-9902 | For IQE file importer try for up to two minutes to open the file | | General | Feature | Minor | 4501 | | 21.04.00-a |
| FFDC-9901 | Add New Tool Showa Chemical S-00456 | | General | Feature | Minor | 4454 | | 21.04.00-a |

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| FFDC-9900 | Rename "all raw data saved" to "all raw data" | Used in Tool Bins from fast I/O boards. "Raw data saved" implied that data is saved to disk. Instead the choice is whether to keep raw data in memory and allow the use of Fast Signal Bins or to only extract summaries from the I/O board. | Program UI | Feature | Minor | | 21.04.00-a |
| FFDC-9896 | Triggers to turn on and off Sensor state | For RGA, applies to Emission and Multiplier. For SOES applies to plasma. | I/O Channels | Feature | Minor | 4449 | 21.04.01-a |
| FFDC-9894 | Add New Tool Hylax 4MK-14 | | General | Feature | Minor | 4366 | 21.04.00-a |
| FFDC-9892 | Universal LDAP search base | If LDAP search base contains a ?, the base is used as is with the ? replaced by user name. | Security | Feature | Minor | | 21.04.00-a |
| FFDC-9891 | Prevent Chamber Lot level analyses from considering Lot Ids which are empty or "NoLotID" | | Analysis | Feature | Minor | | 21.04.00-a |
| FFDC-9890 | SECS DLL for Dainan Tech OMS Espec Oven | Has output command S2F41 BAKE-ABORT. | Connections | Feature | Minor | 4472 | 21.04.01-a |
| FFDC-9888 | API for sending logistics to FabGuard | Lot ID is required, because it is intended to be used as a lookup for other logistics in IO Trigger Secondaries. In API doc, it's under Set Tool Logistics. | API | Feature | Minor | | 21.04.00-a |
| FFDC-9886 | SmartFDC UI 1.0.0 | | Web | Feature | Medium | | 20.12.04-a |
| FFDC-9885 | Prevent I/O Channel trigger based on periodic time to be less than 1 minute | | General | Feature | Minor | 4468 | 21.04.00-a |
| FFDC-9882 | SmartFDC model improvements | | Analysis | Feature | Minor | | 21.04.00-a |
| FFDC-9877 | Add New Tool Semitool ACMS | | General | Feature | Minor | 4350 | 21.04.00-a |
| FFDC-9874 | Prevent and Alarm if Multiple SmartFDC Models attempt to apply to a Run | New Alarm Type: Multiple SmartFDC Models Detail: More than one SmartFDC are enabled. Only the first one is applied. | Analysis | Feature | Minor | 4457 | 21.04.00-a |
| FFDC-9872 | Flat product icons in FabGuard ribbon bar | | Web | Feature | Minor | | 21.04.00-a |
| FFDC-9871 | RVS DLL for CSOT2&3 | This DLL is based on Tibco RV version 8.4.1.Choice in installer is RV_CSOT2and3_841 | Connections | Feature | Minor | 4355 | 21.04.00-a |
| FFDC-9869 | Support Microsoft Edge browser | Fabguard Web and Fabguard Help supports MS Edge (chromium only). | Program UI | Feature | Minor | | 21.04.00-a |
| FFDC-9867 | Ebara E pump commands over TCP | Default port 10000 | Gauges | Feature | Minor | 4286 | 21.04.00-a |
| FFDC-9866 | Add New Tool Trymax NEO2000 | | General | Feature | Minor | 4398 | 21.04.00-a |
| FFDC-9865 | Add a Report to view metrology data from external database | New report in Data View-Metrology Data (External Source) | Analysis | Feature | Minor | | 20.12.04-a |
| FFDC-9864 | Add New Tool Samco RIE-200C | | General | Feature | Minor | 4427 | 20.12.04-a |
| FFDC-9863 | Add Chamber Description to Web Maintenance table | Augments the table on the Maintenance tabs. | Web | Feature | Minor | 4438 | 20.12.04-a |
| FFDC-9861 | Add global preference containing the SmartFDC URL to send messages after database insert | Used to initialize background analyses. | General | Feature | Minor | | 20.12.04-a |
| FFDC-9859 | Add New Tool Disco DGP8761 DFM2800 | | General | Feature | Minor | 4333 | 20.12.04-a |
| FFDC-9853 | Add New Tool Hylax HM2282WLMS | | General | Feature | Minor | 4366 | 20.12.04-a |
| FFDC-9852 | TOI and SECS output commands for Samco RIE200C tool type | Uses the existing SECS DLL for Samco RIE-802IPC, and has S2F41 output commands ABORTSTOP and CYCLESTOP. | Connections | Feature | Minor | | 21.04.00-a |
| FFDC-9851 | Update "Tokki: OLED TM G6A" tool layout for Wuhan Tianma G6 | | General | Feature | Minor | 4393 | 20.12.04-a |
| FFDC-9849 | Update "Tokki: OLED TM G6B" tool layout for Wuhan Tianma G6 | | General | Feature | Minor | 4394 | 20.12.04-a |
| FFDC-9847 | WD xml importer treats APFAserialNumber as Extra6 | | Acquisition | Feature | Minor | | 20.12.04-a |
| FFDC-9845 | Add Lot ID, Slot ID, and Recipe ID to S6F73 | | Connections | Feature | Minor | 4386 | 20.12.04-a |
| FFDC-9840 | Combine FPS, FabRecover, and external Web links global preferences in one new tab called Inficon | Single tab for Inficon product links. Positioned as the last link. | Program UI | Feature | Minor | | 20.12.03-a |
| FFDC-9839 | Integration to FabRecover | Add a global preference for FabRecover URL. The URL needs to include placeholder information. In analyses that configure an OCAP, use "FabRecover:OcapName", where FabRecover is the protocol descriptor and OcapName is the name of the OCAP. In all places where OCAP is accessed, generate a resolved URL and invoke a browser for display. | General | Feature | Minor | 4382 | 20.12.03-a |
| FFDC-9837 | Convert HTML format to SML format for Multiplexer SECS log files | Available from FabGuard Client Advanced menu. Choose a HTML file and it will covert the file to SML and put the new file with the same name, different extension .SML, in the same directory as the source. | General | Feature | Minor | 4298 | 21.04.00-a |
| FFDC-9835 | Add color legend and icon keys to facility | | Web | Feature | Minor | | 20.12.03-a |
| FFDC-9832 | Allow resetting individual Report History Splits in Active Analysis and Active Alarms dialogs | In Active Alarms, Suppression, Shift , and Reset will apply to the Report History Split that detected the fault. In Active analysis, user can choose one or more History Splits to Suppress, Shift , or Reset. | Analysis | Feature | Medium | 4399 | 20.12.03-a |
| FFDC-9831 | Add minimum security access that can issue commands in the Fab HMI | | Security | Feature | Minor | | 20.12.03-a |
| FFDC-9830 | Add units to names of parameters in Facility state web display | | Web | Feature | Minor | | 20.12.03-a |
| FFDC-9829 | Add New Tool Screen Scrubber SS80EX | | General | Feature | Minor | 4340 | 20.12.03-a |
| FFDC-9828 | Add Dynamic Hold Residual, Deviation and Target SPC Chart types for min, max, average, standard deviation, and range FOM values | Added the following SPC Chart types: Dynamic Residual Hold X-min set, Dynamic Deviation Hold X-min set, Dynamic Target Hold X-min set, Dynamic Residual Hold X-max set, Dynamic Deviation Hold X-max set, Dynamic Target Hold X-max set, Dynamic Residual Hold Sdev set, Dynamic Deviation Hold Sdev set, Dynamic Target Hold Sdev set, Dynamic Residual Hold Range set, Dynamic Deviation Hold Range set, Dynamic Target Hold Range set. | Analysis | Feature | Medium | 4377 | 20.12.03-a |
| FFDC-9827 | Facility Rename Gate and Purge Value On/Off to Open/Close | Effects the name IO Channels, facility commands, and FabGuard Web display | Program UI | Feature | Minor | | 20.12.03-a |
| FFDC-9825 | Place Facility global preferences into their own tab | | Web | Feature | Minor | | 20.12.03-a |
| FFDC-9824 | Add global preference to allow pump control from Fab Facility UI | In Facility tab, "Allow Commands in Fab UI" yes or no. | Web | Feature | Minor | | 20.12.03-a |
| FFDC-9823 | Add global preference to equipment data responsible for state information is shown | Global preference governs if the facility state information is shown by it self, or also as data from which state is determined. | Web | Feature | Minor | | 20.12.03-a |
| FFDC-9817 | RVS DLL for Seeya | This DLL is based on Tibco RV version 8.4.1. Choice in installer is RV_Seeya_841 | Connections | Feature | Minor | 4346 | 21.04.00-a |

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| FFDC-9816 | Add New Tool Ebara EAC300bi-hv | | General | Feature | Minor | 4314 | 20.12.03-a |
| FFDC-9815 | Add OPC-UA | | Connections | Feature | Medium | | 21.04.00-a |
| FFDC-9814 | Executive and Node should stop AutoStartService before launching upgrade installer | | Installer | Feature | Minor | 4175 | 21.04.00-a |
| FFDC-9810 | Add New Tool Ulvac Gemini-200E | | General | Feature | Minor | 4325 | 20.12.03-a |
| FFDC-9807 | SECS DLL for SCREEN EX60/EX80 | Has output commands S2F41 STOP, PAUSE, P-PAUSE, and ABORT. | Connections | Feature | Minor | 4340 | 20.12.03-a |
| FFDC-9804 | Add New Tool Takada TWPS-462-TJ | | General | Feature | Minor | 4323 | 20.12.03-a |
| FFDC-9803 | Add logging of I/O details | A global preference determines if logging is on. Initially logs individual TCP messages. | General | Feature | Minor | | 20.12.03-a |
| FFDC-9802 | Separate TCP gauge communication into separate threads by IP address | Allows gauges not to interfere with each other and have one block the communication with another. | Acquisition | Feature | Medium | | 20.12.03-a |
| FFDC-9801 | Allow user to specify location of facility equipment in rack layout | Create independent racks for Pumps, and abatement. Specify pump rack location in Recipe by adding {X, Y} to the end of description in the description column. Allow for independent user control of display of chambers, pump rack, and abatement rack. | Web | Feature | Medium | | 20.12.03-a |
| FFDC-9800 | Active Alarms filtering by Time and enhanced Category | Enhanced Category allow filtering by "Analysis Engine", "Analysis without Interdiction", and "Analysis with Interdiction". For Reports, effectively combined Fault Outcome and Fault I/O settings into a category. These are only used on a brand new IPM (no configuration) and FabGuard client. IPM nodes save their own defaults. | Program UI | Feature | Minor | 4338 | 20.12.03-a |
| FFDC-9799 | Add Global Preference for default filtering in Active Alarms | In Display tab, 3 new options under Active Alarms: Filter Class column, Filter Time column, Filter Analysis column. These are only used on a brand new IPM (no configuration) and FabGuard client. IPM nodes save their own defaults. | Program UI | Feature | Minor | 4338 | 20.12.03-a |
| FFDC-9797 | Add New Tool Scia Systems TRIM200 | | General | Feature | Minor | 4320 | 20.12.03-a |
| FFDC-9796 | TOI for Canon i-Series/Stepper should allow up to 4 simultaneous Process Jobs | | TOI | Feature | Minor | | 20.12.02-a |
| FFDC-9794 | Add New Tool Showa Shinku SEC-16C | | General | Feature | Minor | 4321 | 20.12.03-a |
| FFDC-9793 | Amplifier Offset values for PrismaPlus and QMG7xx RGAs can be viewed and modified | The values are shown in Sensor Hardware configuration and are saved in the Run. | Sensors | Feature | Minor | 3277 | 20.12.03-a |
| FFDC-9788 | Add New Tool TEL SS-4 | | General | Feature | Minor | 4324 | 20.12.03-a |
| FFDC-9785 | Add delimiter count to I/O Secondary parse | Start parsing after the Nth instance of the delimiter. Applies only for forward direction of the 'After' delimiter. If delimiter count is greater than 1 and the instance is not found, the string is deleted. But, if delimiter count equals to 1 and the instance is not found, the full string is used for subsequent parsing. | I/O Channels | Feature | Minor | 4267 | 20.12.03-a |
| FFDC-9784 | Add SECS method 'using S7F5 from Recipe ID' and 'using S7F5 from Sequence ID' | | I/O Channels | Feature | Minor | 4267 | 20.12.03-a |
| FFDC-9782 | Add ability to edit just Report's View and Apply filters | Available for selected Report in Edit menu of Report and Model Manager | Program UI | Feature | Minor | | 20.12.02-a |
| FFDC-9780 | Retrieve last N from the database | Part of sampling in database filters. Maximum number is 99,999. | General | Feature | Minor | 4310 | 20.12.02-a |
| FFDC-9779 | S2F41-INLETXYZ commands for Edwards EcoLink SECS Gauge need option for "INLET B" | For S2F41-INLETPFC on INLET B, IO channel uses Primary ID = 103IdVa, where Id = Inlet ID (01 to 06) and Va = 00 or 01 for Disable or Enable. For S2F41-INLETDEP on INLET B, IO channel uses Primary ID = 104IdVa, where Id = Inlet ID (01 to 06) and Va = 00 or 01 for Disable or Enable. | Gauges | Feature | Minor | 4327 | 19.02.00-k, 20.12.00-f, 20.12.02-a |
| FFDC-9777 | Add New Tool Evatec Radiance | | General | Feature | Minor | 4317 | 20.12.03-a |
| FFDC-9773 | SECS output commands for Evatec Radiance tool type | Uses the existing SECS DLL for Evatec KHAN Control System, but has S2F41 output commands PAUSE, STOP, and ABORT. | Connections | Feature | Minor | 4317 | 20.12.03-a |
| FFDC-9772 | SECS DLL for Scia Systems Trim 200 | Has output commands S2F41 STOP_JOB and PAUSE_JOB. | Connections | Feature | Minor | 4320 | 20.12.03-a |
| FFDC-9771 | SECS output commands for Showa Shinku SEC-16C tool type | Uses the existing SECS DLL for Showa Shinku SPE-2136A and has the same output commands. | Connections | Feature | Minor | 4321 | 20.12.03-a |
| FFDC-9769 | SECS DLL for Takada TWPS82 | Has output commands S2F41 STOP, PAUSE, and ABORT. | Connections | Feature | Minor | 4323 | 20.12.03-a |
| FFDC-9768 | SECS DLL for TEL Clean Track Mark8 Phase6 | Has output commands S2F41 PAUSE and STOP. | Connections | Feature | Minor | 4324 | 20.12.03-a |
| FFDC-9767 | SECS DLL for Ulvac Gemini-200E | | Connections | Feature | Minor | 4325 | 20.12.03-a |
| FFDC-9763 | Allow Model Create/Edit dialog to be resized | | Program UI | Feature | Minor | | 20.12.02-a |
| FFDC-9762 | Allow Run Comparison dialog to be resized | | Program UI | Feature | Minor | | 20.12.02-a |
| FFDC-9757 | Add root cause investigation model that uses Smart algorithm | Run by Run from Time Series Data - Root Cause: Smart Anomaly Diagnostic | Analysis | Feature | Minor | | 20.12.02-a |
| FFDC-9756 | Provide three lines for Pump name in facility | | Web | Feature | Minor | | 20.12.02-a |
| FFDC-9747 | Add Advanced Deviation Signal Bin calculation | Inside the Setpoint Normalization Signal Bin. Deviation = (Parameter - Setpoint) / (Setpoint if not 0, else Parameter if not 0). Allows calculation of Deviation if Setpoint is 0, but Value is not. | Analysis | Feature | Minor | | 20.12.02-a |
| FFDC-9743 | Order of plot drill down choices updated for faster access | The order of choices is replaced based on what is used most often. The new order is : Visible, Nearest, Selected. Also, for Time Series data drilldown , the All Bin choice now is before a Applicable Bin choice. | Program UI | Feature | Minor | | 20.12.02-a |
| FFDC-9741 | Ebara E pump communication over TCP | Default port 10000 | Gauges | Feature | Minor | 4286 | 20.12.02-a |
| FFDC-9740 | Add ability to highlight Bin Names in Multi Run Viewer | This is a functionality allows users to quickly see which key bins are Designated Tool Step, Tool Data Age bin, and Bins with envelopes or levels from analyses. Right click on the Bin list and go "Highlight key Bin names" . Cyan/Green is Designated Tool Step, Magenta is Tool Data Age and Gray is Bins with envelopes or levels. | Program UI | Feature | Medium | | 20.12.02-a |

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| FFDC-9739 | Make Bin names and sort order more consistent in Multi Run Viewer | The sort order and names are now similar to the ones used in Recipe Setup and Run view. | Program UI | Feature | Medium | | 20.12.02-a |
| FFDC-9738 | In Recipes, split setup of Tool Bins from I/O Bins | I/O Bins which includes Snapshot Bins, Latch Bins, and Trigger Bins, are automatically added from I/O channels and are not configured in Recipes. Splitting the display into a separate tab, simplifies the UI. | Program UI | Feature | Medium | | 20.12.02-a |
| FFDC-9734 | SECS DLL for Lam Da Vinci 28F | | Connections | Feature | Minor | 4269 | 20.12.03-a |
| FFDC-9733 | SECS DLL for TEL Lithius Pro Z | Has output command S2F49 Pause. | Connections | Feature | Minor | 4361 | 20.12.03-a |
| FFDC-9732 | Provide API FabGuard login for use by SmartFDC | | Web | Feature | Minor | | 20.12.02-a |
| FFDC-9731 | Add ability to specify user header in HTTP communication message definition | To add an arbitrary header to the HTTP message add the following text: <Cmd_Header>. Replace ... with a line of the header. Use as header line separators. | Connections | Feature | Minor | 4287 | 20.12.02-a |
| FFDC-9729 | Add New Tool Innomax TRAUM120CS AWF31 | | General | Feature | Minor | 4271 | 20.12.02-a |
| FFDC-9727 | Add to Signal Bin Setpoint Normalization a dead band | If both the absolute value of Bin and the absolute value of the setpoint are smaller than the guard band, deviation is not calculated. Ignored if dead band is 0.0 | Analysis | Feature | Minor | | 20.12.02-a |
| FFDC-9723 | Add ability to add Runs using "Similar to selected Run" in Multi Run Viewer | Under the Add button, the feature copies the logistics of the first selected Run into a database filter, allows the user to make modifications and retrieve the runs from the database. | Program UI | Feature | Minor | | 20.12.01-a |
| FFDC-9721 | Add New Tool Innomax TRAUM120CS AWM11 | | General | Feature | Minor | 4271 | 20.12.01-b |
| FFDC-9714 | SECS DLL for Innomax TRAUM120CS | Has output command S2F41 JOBPAUSE. | Connections | Feature | Minor | 4271 | 20.12.03-a |
| FFDC-9713 | Add New Tool Innomax TRAUM120CS AWP21 | | General | Feature | Minor | 4271 | 20.12.01-a |
| FFDC-9711 | Import Snapshot and Latch Bins into Acquisition Dictionary | Allows for use of Acquisition Dictionary entries in I/O setup. | Acquisition | Feature | Minor | | 20.12.01-a |
| FFDC-9710 | Support for National Instruments USB-6002 | | Connections | Feature | Minor | 3786 | 20.12.02-a |
| FFDC-9708 | Local preference of whether to perform Industrial Engineering analysis on a specific FabGuard Node | | General | Feature | Minor | 4256 | 20.12.01-a |
| FFDC-9706 | Global preference of which chamber types to use for generating Lot Process Mismatch and Recipe Mismatch alarms | If the preference is to use only process chambers, substrate counts will not be incremented, tool recipes will not be checked, and Active Lots will not show information from non-process chambers. | General | Feature | Minor | 4256 | 20.12.01-a |
| FFDC-9705 | Add New Tool ASM DEK Galaxy | | General | Feature | Minor | 4193 | 20.12.01-a |
| FFDC-9702 | Modify Tool Type Tokki OLED T4 v2 | | General | Feature | Minor | 4146 | 20.12.00-f, 20.12.01-a |
| FFDC-9697 | Client asks for login when passed a blank session key | | Web | Feature | Minor | | 20.12.01-a |
| FFDC-9696 | Add New Tool Accretech AD2000T | | General | Feature | Minor | 4197 | 20.12.01-a |
| FFDC-9693 | TOI unique message identifier per port | | TOI | Feature | Minor | | 20.12.01-a |
| FFDC-9690 | TOI separation into independent states with configurable transitions | | TOI | Feature | Medium | | 20.12.01-a |
| FFDC-9687 | TOI for Oxford Instruments PlasmaPro 100 and RIE should accept S6F11-Started before or after S2F42 reply to S2F41-START | Previously it was assumed that the tool sent S6F11-Started only after it sent the S2F42 reply to S2F41-START, but it is apparently possible for these tools to send the S6F11 before it sends S2F42. | TOI | Feature | Minor | | 20.12.00-d, 20.12.01-a |
| FFDC-9681 | SECS DLL for Accretech AD2000/AD3000 | Has output commands S2F41 STOP, PAUSE, and ABORT. | Connections | Feature | Minor | 4197 | 20.12.03-a |
| FFDC-9680 | SECS DLL for ASM DEK Galaxy | Has output commands S2F41 STOP and PAUSE. | Connections | Feature | Minor | 4193 | 20.12.03-a |
| FFDC-9679 | Add Global Preference in Misc tab for the SmartFDC UI Url | | Web | Feature | Minor | | 20.12.01-a |
| FFDC-9676 | Add an API to return a list of users in JSON format | | Web | Feature | Minor | | 20.12.01-a |
| FFDC-9673 | Add Load and Unload to TOI for TEL Clean Track ACT8 | For Load, a SECS message is sent to the tool to check load port status and progress is tracked. For Unload, only progress is tracked, which means there is no Unload button in FabGuard Web. | TOI | Feature | Minor | | 20.12.01-a |
| FFDC-9667 | Add Load and Unload to TOI for Oxford Instruments PlasmaPro RIE | For Load, SECS commands are sent to the tool and progress is tracked. For Unload, only progress is tracked, which means there is no Unload button in FabGuard Web. | TOI | Feature | Minor | | 20.12.01-a |
| FFDC-9663 | Update FabGuard web | Eliminate sub-tabs by combining all into a single tab for Tool, Group, and Fab. Make each page have configurable elements. Make KPIs more prominent and easier to see, and streamline access to information contributing to the KPIs. | Web | Feature | Medium | | 21.04.04-a |
| FFDC-9662 | Optimize execution of SmartFDC models | | Analysis | Feature | Medium | | 20.12.01-a |
| FFDC-9658 | SECS DLL for Host BOE 11 should allow sending S5F1 | | Connections | Feature | Minor | 4151 | 20.12.00-b, 20.12.01-a |
| FFDC-9656 | Analysis Server does not apply "Control of Tool Alert" Reports | | Analysis | Feature | Medium | 4082 | 20.08.00-n, 20.12.00-a |
| FFDC-9654 | Isolate Facility and Upgrade preference under their own headers in Preference-Miscellaneous tab | | Program UI | Feature | Minor | | 20.12.01-a |
| FFDC-9653 | Change the naming convention of RGA filaments from 1 and 2 to A and B | | Program UI | Feature | Medium | 4152 | 20.12.01-a |
| FFDC-9652 | Create an alarm when the import file does not have correct information to create a Run | By default the Alarm is generated at most once every 8 hours unless it is cleared. | Acquisition | Feature | Minor | 4130 | 20.12.01-a |
| FFDC-9651 | Ability to import and export values in Tool ALID dialog | | Program UI | Feature | Minor | 3959 | 20.12.01-a |
| FFDC-9650 | Ability to remove all values in Tool ALID dialog | Selected or All option on the Remove button. | Program UI | Feature | Minor | 3959 | 20.12.01-a |
| FFDC-9649 | Global Preference of when to save FabGuard Configuration Summary | Choices are Every Day and Sunday | General | Feature | Minor | 4136 | 20.12.01-a |
| FFDC-9639 | Add ability to compare TRM Recipes | | TRM | Feature | Minor | | 20.12.00-a |
| FFDC-9630 | Add Time of Flight mass spectrometer - Phase 2 | | Sensors | Feature | Medium | | 20.12.00-a |
| FFDC-9629 | Add New Tool Type Evatec BAK EVO 760 | | General | Feature | Minor | 4100 | 20.12.00-a |
| FFDC-9627 | Add an ability to force a trigger to request Secondaries even if Primary contains the same information | New option in the Trigger "Re-retrieve the Primary if also a Secondary" No or Yes | I/O Channels | Feature | Minor | 4089 | 20.12.02-a |
| FFDC-9624 | Add New Tool Type Dynatech RT-RTR-1050 | | General | Feature | Minor | 4162 | 20.12.00-a |
| FFDC-9622 | Add Slot Map to TOI Provision API | | TOI | Feature | Minor | | 20.12.00-a |
| FFDC-9615 | Sort I/O Trigger Secondaries in standard order | Sort such that the logistics values are show in the same order in the rest of FabGuard. | Program UI | Feature | Minor | | 20.12.00-a |

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|------------|--|--|--------------|---------|--------|------|------------------------|
| FFDC-9612 | Add New Tool Type Showa Shinku SPE-2136A | | General | Feature | Minor | 4150 | 20.12.00-a |
| FFDC-9606 | TOI for Canon i-Series/Stepper uses Extra1 as Reticle ID and checks that it is in Reticle Library | | TOI | Feature | Minor | | 20.12.01-a |
| FFDC-9604 | Add data output for Edwards Ecolink SECS | Allow users to send time series data to Edwards abatement using SML. | I/O Channels | Feature | Minor | 4168 | 20.12.00-a |
| FFDC-9602 | Add new report category 'process control' in Output parameters | | Analysis | Feature | Minor | 4160 | 20.12.00-a |
| FFDC-9601 | In the Report Grid Edit mark all errors by coloring appropriate section of columns | Now marks all, not just SPC error. Provides more information on Reports that have errors. Also applied to single Full Report Create/Edit. | Program UI | Feature | Minor | | 20.12.00-a |
| FFDC-9599 | SECS DLL for Dynatech DT-RTR-1050 | Has output command S2F41 STOP. | Connections | Feature | Minor | 4162 | 20.12.00-a |
| FFDC-9598 | SECS DLL for Showa Shinku SPE-2136A | Has output command S2F41 PAUSE. | Connections | Feature | Minor | 4150 | 20.12.00-a |
| FFDC-9588 | Allow SmartFDC models to be build from Runs without Designated Tool Step | The Tool Step in this case will be 0 and the data will be for the whole Run. | Analysis | Feature | Minor | | 20.12.00-a |
| FFDC-9583 | Add Chamber Type for IPM Facilities | Chamber Type is configured Tool-Chamber-Sensor Identification dialog. Used only OEE calculation. | General | Feature | Minor | | 20.12.00-a |
| FFDC-9581 | TOI initialization should not disable events unless a specific tool requires doing so | | TOI | Feature | Minor | | 20.12.00-a |
| FFDC-9574 | Add support for Slotmap to TOI for AMAT 200mm Centura/Endura/Producer | This uses the custom SECS message S2F65, which allows up to 4 groups of Slot/PPID combinations (the slots within one group must be consecutive). | TOI | Feature | Minor | | 20.12.00-a |
| FFDC-9573 | Add New Tool Type Sunic EV BK | | General | Feature | Minor | 4131 | 20.12.00-a |
| FFDC-9571 | SECS DLL for Host Visionox V3 | | Connections | Feature | Minor | 4067 | 20.12.00-a |
| FFDC-9570 | Add importer for IQE | | General | Feature | Minor | 4003 | 20.12.00-a |
| FFDC-9569 | Support for National Instruments PXIe-6356 | | Connections | Feature | Minor | 4147 | 20.12.00-a |
| FFDC-9567 | New tool types Tokki OLED T4 v2 and T4 v3 | | General | Feature | Minor | 4146 | 20.12.00-a |
| FFDC-9565 | Chamber comparison from distribution report | | Analysis | Feature | Minor | 4088 | 20.12.00-a |
| FFDC-9562 | SECS DLL for Naura ILINK 300mm | Supports TOI for "Naura eVictor v2" tool using S3F17, S16F21, S16F11, and S14F9. | Connections | Feature | Minor | 4128 | 20.12.00-a |
| FFDC-9561 | SECS DLL for Cannon FPA-3030i5+ | Supports TOI using S16F11 and S16F5. | Connections | Feature | Minor | | 20.12.00-a |
| FFDC-9560 | Add New Tool Tokki OLED V3 Line 2 | | General | Feature | Minor | 4075 | 20.12.00-a |
| FFDC-9554 | Filter IPM logs by Chamber number | | Program UI | Feature | Minor | 4113 | 20.12.01-a |
| FFDC-9552 | Add Naura eVictor V2 tool type | | General | Feature | Minor | 4128 | 20.12.00-a |
| FFDC-9545 | Support custom S6F101 message on AMAT tools (between Legacy and GEM controller) | FabGuard creates a fake CEID from the S6F101 message, with CEID=100000000+1000*Id1+Id2, where Id1 is Index=4 (Hierarchy=1.3.2) in the S6F101 and Id2 is Index=5 (Hierarchy=1.3.3). These fake CEIDs can be used as trigger Primaries and Secondaries, either using Event by Index or Event by Hierarchy. This is available in the SECS DLLs for AMAT 5000, AMAT Centura 200mm, AMAT Endura 200mm, and AMAT Producer 200mm. | Connections | Feature | Minor | 2904 | 20.12.02-a |
| FFDC-9544 | Add ">= 10,000,000,000" to SECS Multiplexer's options for Host SVID redirect | SVIDs >=2^32 must be sent in U8 or I8 format. Only SVIDs >=10e9 and <11e9 are redirected to FabGuard. The format of SVIDs is not changed, which means the format of SVIDs that are not redirected to FabGuard must be something the tool understands. | Connections | Feature | Minor | | 20.12.02-a |
| FFDC-9523 | Sign all .exe and .dll inputs to installers and all .exe outputs from installers | | Installer | Feature | Minor | | 20.08.00-m, 20.12.00-a |
| FFDC-9519 | Enable Dynamic Content Compression feature in InstallAndConfigureIIS installer for FabGuard Executive | | Web | Feature | Minor | | 20.12.00-a |
| FFDC-9471 | Add Harsh CPM RGA sensor | Includes modification to the Recipe and RGA hardware parameters. | Sensors | Feature | Minor | 3756 | 20.12.00-a |
| FFDC-9469 | Add Augent OPG550 sensor | | Sensors | Feature | Medium | | 20.12.04-a |
| FFDC-9465 | Add Include/Exclude side tab and Bins side tab to Multi Run Viewer | This is a functionality similar to the the one in Report dialog. Accessible from vertical tab selector. Include/Exclude tab helps with faster selection. Bins tab removes the Runs view so Bins list goes from top to bottom of MRV. The default side tab that is selected when MRV is launch is Bins and Runs. | Program UI | Feature | Medium | | 20.12.02-a |
| FFDC-8839 | Add INFICON CDG gauge using RS232 protocol | | Gauges | Feature | Minor | 3219 | 21.04.00-a |
| FFDC-10728 | Add Web refresh and logout parameters to security API | | API | Feature | Minor | | 22.03.00-a |
| FFDC-10726 | SmartFDC UI 2.3.0 | SmartFDC is now configured with FabGuard's Authentication Method. Login now uses a popup instead of inline. All dialog boxes are now draggable. | Web | Feature | Minor | | 22.03.00-a |
| FFDC-10683 | Always shift Reports if the "Shift Target on New or Reset" is enabled | Previously, if the user manually requested a History Reset from Active Analysis or Alarm Manager, shift was not performed. | Analysis | Feature | Medium | | 22.03.00-a |
| FFDC-10681 | Active Analysis show if there is pending Reset or Shift for the Report or individual History | The information is in columns labeled Status (previously labeled Suppress). | Program UI | Feature | Minor | | 22.03.00-a |
| FFDC-10675 | Implement TOI and Output Commands for Lam SP203L | | TOI | Feature | Minor | 5556 | 22.03.00-a |
| FFDC-10674 | Implement TOI for Semsysco Triton | | TOI | Feature | Minor | 5557 | 22.03.00-a |
| FFDC-10663 | Add 3 gases for Augent OPG550 | Added gasses are CH, CO, F. Applies to firmware 01.00.10.0116 and above. | Sensors | Feature | Minor | | 22.03.00-a |
| FFDC-10661 | Add Secondary logistics to Tool Recipe Verification trigger that are used in the output message in case of TRM failure | | I/O Channels | Feature | Minor | 5553 | 22.03.00-a |
| FFDC-10658 | Add analysis History Reset trigger | | Analysis | Feature | Minor | | 22.03.00-a |
| FFDC-10652 | Allow single space for delimiters I/O Channel Secondary parsing | Instead of disallowing it, the UI warns that only spaces are present because spaces are impossible to see in the grid cell. | I/O Channels | Feature | Minor | 5604 | 22.03.00-a |

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| FFDC-10650 | Ability to suppress, shift and reset Active Analyses for a Tool or Chamber without opening Active Analysis dialog | In Client right click on a Tool or Chamber. The menu gives suppress, shift, and reset options for all Reports/Models if on a Chamber. Right click on Tool it will suppress, shift and reset for EPI/MIs. | Analysis | Feature | Minor | | 22.03.00-a |
| FFDC-10642 | Allow grid cell to show password dots rather than password text | | Program UI | Feature | Minor | | 22.03.00-a |
| FFDC-10519 | Add tool type Lam SP203L | | General | Feature | Minor | 5556 | 22.03.00-a |
| FFDC-10517 | Add tool type SCREEN Scrubber SS80EX v3 | | General | Feature | Minor | 5560 | 22.03.00-a |
| FFDC-10516 | Add tool type SCREEN Scrubber SS80EX v2 | | General | Feature | Minor | 5560 | 22.03.00-a |
| FFDC-10514 | Show Reports that apply to each Bin Statistic in the Recipe Plan tree | | Program UI | Feature | Minor | | 22.01.10-a |
| FFDC-10509 | Allow FabGuard Client to impersonate a Network Account | This feature only effects FabGuard Clients, not FabGuard Nodes or Executive. All instances of FabGuard Client will automatically login to the domain using the Network Account authenticated users will have the same domain permissions as the Network User. All access will rely only on FabGuard Authorization Policy and security roles. Due to Windows OS requirements, browsing to files is not allowed. (See Help for more restrictions). | Security | Feature | Minor | 5460 | 22.01.10-a |
| FFDC-10508 | Allows each separate LDAP search string to have a separate default FabGuard user role | | Security | Feature | Minor | 5460 | 22.01.10-a |
| FFDC-10506 | SECS DLL for YES VertaCure XP | | Connections | Feature | Minor | 5432 | 22.03.00-a |
| FFDC-10504 | Add tool type JR Automation Laser Anneal | | General | Feature | Minor | 5419 | 22.01.10-a |
| FFDC-10503 | Add tool type Centrotherm Activator 200 | | General | Feature | Minor | 5157 | 22.01.10-a |
| FFDC-10501 | Add RPO and RTG commands for communication with Aera 78 series MFC | | Gauges | Feature | Minor | 5472 | 22.01.10-a |
| FFDC-10500 | Add tool type Naura Akrion GAMA | | General | Feature | Minor | 5474 | 22.01.10-a |
| FFDC-10499 | Add tool type YES VertaCure XP | | General | Feature | Minor | 5432 | 22.01.10-a |
| FFDC-10498 | SECS DLL for PVA TePla IoN 100-40Q | | Connections | Feature | Minor | 5506 | 22.01.10-a |
| FFDC-10497 | Add tool type PVA TePla IoN 100-40Q | | General | Feature | Minor | 5506 | 22.01.10-a |
| FFDC-10496 | Add tool type Centrotherm Rapid 200 | | General | Feature | Minor | 4688 | 22.01.10-a |
| FFDC-10492 | SECS DLL for Naura Akrion Wet Station | | Connections | Feature | Minor | 5474 | 22.01.10-a |
| FFDC-10489 | Do not update SPC Report definition in the database after user or automatic shift | Instead of modifying the Report in the database, modify specific Report instance on a FabGuard Node. Allows the same Report definition to be used on multiple Chambers while preserving the ability to shift the local statistics for a specific Chamber. If user initiated, there is an audit trail. If due to History reset, there is a marker on the Report display. | Acquisition | Feature | Minor | 5014 | 22.01.10-a |
| FFDC-10487 | Improve Anomaly Model training status text in Active Analysis | | Program UI | Feature | Minor | | 22.01.10-a |
| FFDC-10486 | Add Tool type NuFlare EPIREVO S6 | | General | Feature | Minor | 5443 | 22.01.10-a |
| FFDC-10480 | Add tool type JST JF21962 | | General | Feature | Minor | 5376 | 22.01.10-a |
| FFDC-10478 | Dynamically modify Anomaly envelopes based on number of training Runs | | Analysis | Feature | Minor | | 22.01.10-a |
| FFDC-10477 | Add anomaly detection based on Average and Standard Deviation of auto trimmed time series data | Training calculates Average and Standard Deviation. Application determines distance to target and generates an anomaly score. | Analysis | Feature | Minor | | 22.01.10-a |
| FFDC-10475 | SmartFDC UI 2.2.0 | Add link to Active Analyses in FabGuard. Add filter criteria to recurrence page. Match correct data age to each bin. | Web | Feature | Minor | | 22.01.00-a |
| FFDC-10474 | Add a Report that treats each Indicator as an independent Report displaying the results Multi Report Viewer | Same as "Quick view for FOM", but allows saving of the Report. Add Report-Data View-Figure of Merit Data (Multi) or Equipment Performance Indicator Data (Multi) or Maintenance Indicator Data (Multi) | General | Feature | Minor | 5468 | 22.01.10-a |
| FFDC-10470 | SECS DLL for NuFlare EPIREVO S6 | | Connections | Feature | Minor | 5443 | 22.01.10-a |
| FFDC-10468 | Add Heater Temperature special Bins to Harsh RGA Sensor | | Sensors | Feature | Minor | 5458 | 22.01.00-a |
| FFDC-10456 | SECS DLL for JST JF21962 | | Connections | Feature | Minor | 5376 | 22.01.10-a |
| FFDC-10451 | Add Triggers for auto pump down and shut down of CPM | Equipment triggers: Sensor Pump-down with inlets Open Trigger, Sensor Pump-down with Inlets Closed Trigger and Sensor Shut-down Trigger | Sensors | Feature | Minor | 5422 | 22.01.00-a |
| FFDC-10450 | Show Automated Acquisition Manager summary as a Control Summary-Phase 1 | | General | Feature | Minor | | 22.01.00-a |
| FFDC-10448 | Add new Specification Level type +/-Value for Relative Level in all SPC Reports | | Analysis | Feature | Minor | | 22.01.10-a |
| FFDC-10444 | Improve Real Time Viewer start/synchronization time | | General | Feature | Minor | 5421 | 22.01.00-a |
| FFDC-10439 | SECS DLL for JR Automation Wafer Laser Processing Station | | Connections | Feature | Minor | 5419 | 22.01.10-a |
| FFDC-10436 | Add N2 purge control to RGA Sensor Hardware Configuration | | Sensors | Feature | Minor | 5391 | 22.01.00-a |
| FFDC-10435 | Allow user entered target for SPC Shift from Active Analysis | Instead of using the value from the next process to determine shift target, use the user supplied value. New right click in Active Analysis - Target Shift to user value | Acquisition | Feature | Minor | 5410 | 22.01.10-a |
| FFDC-10430 | Add tool Veeco Waferstorm 3300 | | General | Feature | Minor | 5279 | 22.01.00-a |
| FFDC-10427 | FabGuard web not to color KPI cells in Summary table | | Web | Feature | Minor | | 22.01.00-a |
| FFDC-10426 | Add new tool Ulvac Enviro-1Xa 2C | | General | Feature | Minor | 5348 | 22.01.00-a |
| FFDC-10420 | Support ASCII CEIDs in "SPTS CPX/LPX/VPX - ASCII" SECS DLL | This requires that CEIDs be ASCII, i.e., the non-numeric human-readable text defined by the tool. The file "SECS CEID List.dat" that contains the conversion from FabGuard's internal numeric CEIDs to the tool's non-numeric CEIDs is included by the FabGuard installer when this SECS DLL is selected. Defining RPTIDs (with S2F33) and Linking them to CEIDs (with S2F35) is not supported. ASCII SVIDs and ECIDs were already supported and required. ALIDs are still assumed to be numeric. | Connections | Feature | Minor | 4761 | 22.01.00-a |

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|------------|--|--|-------------|---------|--------|------|------------|
| FFDC-10417 | Use selected chamber when showing Active Analyses from FabGuard Web | | Web | Feature | Minor | | 22.01.00-a |
| FFDC-10416 | Alarm when both cache files cannot be opened | | General | Feature | Medium | 5393 | 22.01.10-a |
| FFDC-10402 | Add new tool Tokki OLED G6 | | General | Feature | Minor | 5354 | 22.01.00-a |
| FFDC-10399 | SECS DLL for Ulvac Optima | Supports TOI for tool type Ulvac Enviro-1Xa 2C. | Connections | Feature | Minor | 5348 | 22.01.00-a |
| FFDC-10396 | Add an Active column to System Status bar in FabGuard Node Tool screen | Column shows Active Alarms and Active Analyses counts. Background is red if there are red alarms and Yellow if there are yellow Alarms. | Program UI | Feature | Minor | | 21.09.03-a |
| FFDC-10393 | SECS output commands for PSK DAS2000 | Has S2F41 output commands PAUSE, STOP, and STOPW. | Connections | Feature | Minor | 5226 | 21.09.03-a |
| FFDC-10388 | Add explanations to History Reset right click menu in Active Alarms and Active Analyses | Append to History Reset menu "(choose which histories)", "(specific history responsible for the Alarm)" or "(all histories)" depending on how many Report histories exist and which dialog. | Program UI | Feature | Minor | | 21.09.03-a |
| FFDC-10386 | Remove green Alarm marker in Multi Run View | For Runs with no Alarms, do not show any alarm marker the bitmap in Multi Run Viewer's Run list. If a Run cannot be loaded, show a large red X. | Program UI | Feature | Minor | | 21.09.03-a |
| FFDC-10380 | Add tool type Varian m2i | | General | Feature | Minor | 5271 | 21.09.03-a |
| FFDC-10379 | SECS DLL for TOWA FFT-1030W | Has S2F41 output commands STOP and ABORT. Supports TOI for tool type TOWA FFT-1030W. | Connections | Feature | Minor | 5277 | 22.01.00-a |
| FFDC-10378 | Support for National Instruments PCIe-6374 and PCIe-6376 boards | | Connections | Feature | Minor | 5291 | 22.01.00-a |
| FFDC-10377 | Add heartbeat checks and alarm to I/O Output, EPI/Lot analysis, Tool Cache, and Tool Communication threads | I/O Output thread is responsible for all messages defined in I/O output Channels, EPI/Lot analysis thread processes EPI/MI changes and performs Lot industrial engineering analyses. Tool Cache thread is responsible for caching FabGuard recipes, caching TRM recipes, and locally deleting old Runs. Tool Communication thread is responsible for TOI, TRM verification, and ECID verification. | General | Feature | Minor | 5250 | 22.01.00-a |
| FFDC-10375 | Add TCP communication protocol ICD | | Connections | Feature | Minor | 5025 | 21.09.03-a |
| FFDC-10372 | Data Age for never connected Tool Bins should not be 0 | | Acquisition | Feature | Minor | | 21.09.03-a |
| FFDC-10371 | Add a "Analysis Reject from Abort" Meaning to Real Time Analysis | Allows detection of process abort condition based on logic in Real Time Analysis. | Analysis | Feature | Minor | 5286 | 21.09.03-a |
| FFDC-10367 | Add a Color & Symbol Order option in SPC chart to use any number found in the logistic | In display settings on bottom of SPC Chart, Color & Symbol: new options "Num/Alph" If a logistic has a number anywhere in its value, use the number as a unique identifier. Otherwise assigns value of 0 and legend label of "(Non numeric)". For example, Tool ID "A02BP&E" will have a value of 2. This forces the plot number shown in the legend to be based on the number in the logistic. Applies to only Tool ID and Chamber ID, otherwise uses Alpha/Numeric values. | General | Feature | Minor | 4633 | 21.09.03-a |
| FFDC-10360 | Allow users to type in a UNC path name for a directory in File Open dialog | | Program UI | Feature | Minor | | 21.09.03-a |
| FFDC-10359 | RVS DLL for Sunic | | Connections | Feature | Minor | 5237 | 22.01.00-a |
| FFDC-10355 | Add pareto plots to KPI drilldown tables in web | Single row tables do not get Pareto. | Web | Feature | Medium | | 22.01.00-a |
| FFDC-10353 | Check for carriage returns in Bin names | | Program UI | Feature | Minor | | 21.09.03-a |
| FFDC-10352 | Check for carriage returns within database filter un-quoted clauses | Warns for if following (double quotes are not in the actual string): "aa\rbbb". | Program UI | Feature | Minor | 5095 | 21.09.03-a |
| FFDC-10350 | Add an Anomaly marker | Anomaly marker is a up triangle (same as Alarm) with teal color. Note, presence of Anomaly is not a fault and thus is not an Alarm, but similar to Blue Alarms, indicates important information. Presence of an Anomaly is higher importance compared to Blue Alarms, and thus is shown even if Blue Alarms are present. | Program UI | Feature | Minor | | 21.09.03-a |
| FFDC-10349 | Check for quote-comma-quote in database filter quoted clauses | Warns for if following (double quotes are not in the actual string): "aaa',bbb". This is treated as a single clause, but could be incorrect entry of two clauses. | Program UI | Feature | Minor | 5095 | 21.09.03-a |
| FFDC-10348 | Add ability to set Sweep time to BB60C Signal Hound recipe | Acquisition Control has new option Sweep Time (ms) in the Recipe. | Sensors | Feature | Minor | | 21.09.02-a |
| FFDC-10346 | Do not force Nodes to clear Report and Model history on database upgrade | Clearing Report and Model history is still necessary if the previous database version is too old, which currently means if the version was less than 21.04.00. | Database | Feature | Minor | 5244 | 22.01.00-a |
| FFDC-10343 | Add "Figures of Merit with Data Count" metric | Due to logic in Signal Bins not every Figure of Merit has data. The FOMs without data are not analyzed. The new metric allows independent tracking of both all FOMs and FOMs with data. Found in Run-Metrics | Analysis | Feature | Medium | | 21.09.03-a |
| FFDC-10342 | Allow full range of colors in summary tables | | Web | Feature | Minor | | 21.09.02-a |
| FFDC-10340 | MCD option to subtract Background Tag scan | This feature uses the Tag Scan capability: Each Sensor can maintain one Background Scan. The Sensor's Tag Scan is manually set from any Run or in Sensor Monitor screen. The Sensor's Tag Scan scan is automatically copied to every Run acquired by the Sensor. It is also possible to configure acquisition to Tag the first Scan in the Run. | Analysis | Feature | Minor | 4056 | 22.01.00-a |
| FFDC-10339 | Remove "Recipe" and "EPI and MI" tabs from Automated Acquisition Manager | The Recipe tab functionality is moved the "Recipe Plan tab" under the "Recipe Development" button. The "EPI and MI" tab is no longer required since I/O Input has the same capability with the filtering option. These tabs were always skipped and removing them simplifies the setup process. | Program UI | Feature | Minor | | 21.09.02-a |

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| FFDC-10338 | Add to Bin Character choices reflecting only outer or inner envelopes | Some Bins should have only outer or inner parameters. For example, reflected power has an upper (outer) limit, but no lower (inner) limit. (New Choices: Controlled Only Outer, Controlled Only Inner, Actuator Absolute Only Outer, Actuator Absolute Only Inner, Uncontrolled Absolute Only Outer, Uncontrolled Absolute Only Inner) | Analysis | Feature | Minor | | 21.09.02-a |
| FFDC-10335 | SECS HSMS channels should restart communication on T6 timeout | | Connections | Feature | Minor | | 21.09.02-a |
| FFDC-10333 | If using non-default path for upgrade installers, Executive should not replace existing Node installer if it is the correct version number-letter | This is only relevant for System Upgrade with multiple Executives that use the same non-default path for upgrade installers. | General | Feature | Minor | | 21.09.02-a |
| FFDC-10330 | Generate alarm on error when obtaining ECID values during automatic ECID Verification | | Security | Feature | Minor | 5143 | 21.09.02-a |
| FFDC-10328 | Create Audit entry when a user modifies list of Golden ECIDs | | Security | Feature | Minor | 5143 | 21.09.02-a |
| FFDC-10326 | In I/O Channel setup rename "Time Delay before routing" to "Time Delay after getting a Primary (ms)" | The new name better reflects what is actually happening and adds time units. | Program UI | Feature | Minor | 5212 | 21.09.02-a |
| FFDC-10322 | RVS DLL for Tianma Wuhan | | Connections | Feature | Minor | 5162 | 22.01.00-a |
| FFDC-10319 | Add browse button to Global Preference grid for fields that need directory paths | | Program UI | Feature | Minor | | 21.09.02-a |
| FFDC-10314 | Add the global Run save location to File Open dialog tool list dropdown | If using a Global Path for Run Save and Export, the File Open dialog, for example in MRV Add Run Manually, will now have a "Quick select Tool or Path to Browse" on the bottom to select the configured Global Path. | Program UI | Feature | Minor | 5194 | 21.09.02-a |
| FFDC-10313 | Add New Tool Lam Sabre 3D | | General | Feature | Minor | 5116 | 21.09.02-a |
| FFDC-10311 | Add ability <OcapLink>place holder to I/O Output Channel | | I/O Channels | Feature | Minor | 5189 | 21.09.02-a |
| FFDC-10310 | Add KPI columns for best/worst and average values for week, month and last 90 days | | Web | Feature | Minor | | 21.09.02-a |
| FFDC-10309 | RVS DLL for BOE B12 | | Connections | Feature | Minor | 5039 | 21.09.02-a |
| FFDC-10304 | Add global preference to not determine KPIs for Substrates | Substrate KPIs only are shown on the web in detailed table. Under Background Information Generation, new options is Determine for Substrate Yes or No (default). | Web | Feature | Minor | | 21.09.02-a |
| FFDC-10302 | Show information on "Live Data" screen as a table | What is show on the screen is set by Global Preference. | Program UI | Feature | Minor | 5148 | 21.09.02-a |
| FFDC-10299 | SmartFDC UI 2.1.0 | Has more drill down and viewing details. | Web | Feature | Minor | | 21.09.01-a |
| FFDC-10295 | Create a density table in every Report Task and web Report request | Place the density table under the Report images and include them in the generated PDF. Density table are only created for reports that show density tables when you view them. SPC Reports do not have density tables so neither do the PDFs. Only applies to Metric Summary Reports and Alarm Summary. | General | Feature | Minor | | 21.09.02-a |
| FFDC-10294 | Add new EPI timer stop and reset triggers that work only if EPI is currently within levels applied in SPC Reports | New EPI Conclude while no Fault is added to the all the EPI triggers. So if there is a SPC fault on a stop, the conclude will not be remove the EPI if a fault occurred. | I/O Channels | Feature | Minor | 5175 | 21.09.02-a |
| FFDC-10292 | Add Anomaly Metrics Summary Report | | General | Feature | Minor | | 21.09.01-a |
| FFDC-10291 | Update Density table coloring | Colors are now based on range of values in the cells, not summary columns. Depending on the Metric, range may be from min to max, or 0 to max, or 0 to 1. Color may be more intense at min or at max. Blue color is used if there is not concept of good (green color) or bad (red color) for the selected Metric. | General | Feature | Minor | | 21.09.01-a |
| FFDC-10290 | In Metrics Summary Reports combine "Result shown" choice | To distinguish between "vs. Group" and "vs. Time" use "X axis" choice. The new choice "Summary Group" will plot "vs. Group", while time choices will plot "vs. Time". | Program UI | Feature | Minor | | 21.09.01-a |
| FFDC-10287 | Add Heartbeat specific Alarm | In addition to generating an Alarm for a specific engine that has a heartbeat failure, generate a new System: Heartbeat failure Alarm. | General | Feature | Minor | | 21.09.01-a |
| FFDC-10285 | Change RGA unit from Raw and Current to Amp | Shows actual units used for RGA signal. When non abbreviated display is used, "Amp (Raw)" will shown. | Program UI | Feature | Minor | | 21.09.01-a |
| FFDC-10282 | Allow changing the detector type of a Prisma Plus RGA | | Sensors | Feature | Minor | 5073 | 21.09.03-a |
| FFDC-10279 | Support new compression technique using Powershell | | General | Feature | Minor | 5137 | 21.09.02-a |
| FFDC-10278 | Add Signal Hound BB60C RF sensor | | Sensors | Feature | Minor | | 21.09.01-a |
| FFDC-10277 | Allow "Designated Process Active" Bin | Currently intended only for future use in Anomaly modeling. | Analysis | Feature | Minor | | 21.09.01-a |
| FFDC-10276 | Rename "Health (Metrics) Summary" Reports to "Metrics Summary" Reports | "Process Health (Metrics) Summary" renamed to "Process Metrics Summary""Lot Health (Metrics) Summary", renamed to "Lot from Process Metrics Summary""Figure of Merit Health (Metrics) Summary" renamed to "Figure of Merit Metrics Summary""Analysis Health (Metrics) Summary renamed to "Analysis Health Metrics Summary" | Program UI | Feature | Minor | | 21.09.01-a |
| FFDC-10274 | Add data density table to Anomaly Score Report | Table rows by Anomaly object. Cell value from worst for the hour/day/week, etc. | Program UI | Feature | Minor | | 21.09.01-a |
| FFDC-10273 | Add New Tool inficon T6 | | General | Feature | Minor | 5119 | 21.09.01-a |
| FFDC-10272 | Add New Tool inficon T4 | | General | Feature | Minor | 5119 | 21.09.01-a |
| FFDC-10269 | Drill down from FabGuard Web KPI tables | Click on a cell. Executive drilldown to Group, Group drilldown to Tool, Tool drilldown to Chamber. Chamber display depends on KPI. | Web | Feature | Minor | | 21.09.02-a |
| FFDC-10266 | Add New Tool Semsysco Triton | | General | Feature | Minor | 4902 | 21.09.01-a |

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| FFDC-10265 | Report task creates a tree of PDFs matching the report folders | In the configured FabGuardOutput folder or the default folder of C:\Inficon\web\reports a directory structure that matches the Report and Model Manager folder tree will be created if the Generate Report task is created with the "Use Report folder" is Yes. For example, if a Folder A is selected that contains 2 Reports in the task, the directory structure will be C:\Inficon\web\Reports\Database\A\ <date>\<taskname, "use="" a="" also="" be="" date>.pdf.="" each="" email="" folder="" folder"="" for="" if="" is="" link="" or="" pdf="" report="" selected.<="" sent="" separate="" td="" will="" with="" yes,="" you=""> <td>Executive</td> <td>Feature</td> <td>Minor</td> <td>4730</td> <td>21.09.02-a</td> </date>\<taskname,> | Executive | Feature | Minor | 4730 | 21.09.02-a |
| FFDC-10260 | Reboot in FabGuard Web should stop and restart AutoStart before rebooting | | General | Feature | Minor | 5104 | 21.09.01-a |
| FFDC-10258 | Allow user to walk through the math of a Signal Bin from Multi Run Viewer | Access by right click on a Bin and select "Walkthrough" | Program UI | Feature | Minor | 4363 | 21.09.01-a |
| FFDC-10254 | Add filters for Figure of Merit to Chamber Matching from Process report | Add all Indicator information to filters | Database | Feature | Minor | | 21.09.01-a |
| FFDC-10253 | Add New Tool Disco DFG8540 Grinder | | General | Feature | Minor | 5019 | 21.09.01-a |
| FFDC-10252 | Add a Signal Bin type that associates a string value of a specific logistic to a number | In Signal Bins, under the Add button use Logistic Association. | Analysis | Feature | Minor | 4823 | 21.09.01-a |
| FFDC-10251 | In Report and Multi Run Viewer allow Include/exclude to be checked without execution | | General | Feature | Minor | 4654 | 21.09.01-a |
| FFDC-10247 | SmartFDC UI 2.0.0 | User login with FabGuard credentials. User feedback to teach Anomaly models. Support for SQL Server database. Allow viewing of Runs for lots without anomalies. | Web | Feature | Minor | | 21.09.00-a |
| FFDC-10245 | Add New Tool PPE S600 | | General | Feature | Minor | 4988 | 21.09.02-a |
| FFDC-10243 | Allow Alarms to send an HTTP message | Configured in Alarm Setup dialog similar to how Executable is configured. | General | Feature | Minor | 5085 | 21.09.01-a |
| FFDC-10241 | Add a global preference controlling the time without file import that generates an alarm | To Acquisition tab, added File Import - "Maximum number of hours without file import before generating a fault (hours)" Default is 24 | General | Feature | Minor | 5086 | 21.09.01-a |
| FFDC-10232 | Add New Tool Shinko Seiki SPZM6121 | | General | Feature | Minor | 4987 | 21.09.01-a |
| FFDC-10231 | Add more Anomaly feedback UI to FabGuard application | Accessible from a Drilldown: Anomaly Time Series Envelope Data in Anomaly Score Report. | General | Feature | Minor | | 21.09.00-a |
| FFDC-10226 | Show Train/Untrain information per Tool Recipe / Acquisition Trigger ID for Anomaly model in Active Analysis | Acquisition Trigger ID is based on Acquisition Trigger and is used to maintain a separate internal Anomaly model for Acquisition 1, Acquisition 2, etc. | Program UI | Feature | Minor | | 21.09.00-a |
| FFDC-10224 | Validate Bin Character and setup of Designated Tool Bin when saving a Recipe | User can choose to ignore violations. | Acquisition | Feature | Minor | | 21.09.01-a |
| FFDC-10222 | Add New Tool Ulvac Gemini-2005 | | General | Feature | Minor | 4986 | 21.09.01-a |
| FFDC-10221 | Get FOMs from Acquisition trigger at beginning of Run and from "FOM from Secondary" trigger at end of Run | FabGuard only gets FOMs from "FOM from Secondary" trigger if the values have changed since Run started. | Acquisition | Feature | Medium | 5005 | 21.09.00-a |
| FFDC-10216 | Add New Tool Siconnex AIS AL-300 | | General | Feature | Minor | 4973 | 21.09.00-a |
| FFDC-10215 | SECS DLL for Balzers BAK with KHAN | Has S2F21 output commands for Wait, Hold, and Abort. | Connections | Feature | Minor | 5034 | 21.09.01-a |
| FFDC-10213 | Add Box plot to SPC and Data view Reports | | General | Feature | Minor | | 21.09.01-a |
| FFDC-10212 | Upgrade specific FabGuard Node to new letter version | Select FabGuard Node in FabGuard Client and click on the Deploy menu under Setup button and there should be a new Upgrade. Make sure to have installed the FabGuardSystemUpgrader on the FabGuard Executive computer. | General | Feature | Minor | 5016 | 21.09.01-a |
| FFDC-10205 | Add an Output I/O Channel for Trigger Did Not Occur fault | "Missing Trigger Output" new output channel. The Chamber of the Output Event must match the chamber of the Trigger for output to be sent. Also use Type of occurrences before output is Count of Events. | I/O Channels | Feature | Minor | 5022 | 21.09.00-a |
| FFDC-10204 | Add custom Recipe Plan Run exporter using SKv1 format | | General | Feature | Minor | 4669 | 21.09.00-a |
| FFDC-10203 | Global preference whether to calculate 7 day KPIs shown only in detail table on the FabGuard Web | KPI Time Range: 24 hours or 24 Hours and 7 Days(only shown in detail tables). Not calculating 7 day KPIs significantly reduces FabGuard Executive's memory and CPU resources. Default is to only calculate 24 hour KPIs. | Web | Feature | Minor | | 21.09.00-a |
| FFDC-10200 | Modify Existing Tool Evatec Radiance | | General | Feature | Minor | 4492 | 21.09.00-a |
| FFDC-10197 | Add to Recipe Plan verification checks for Smart FDC requirements | The new checks are considered warnings and are marked in yellow | General | Feature | Minor | | 21.09.00-a |
| FFDC-10186 | Create EPIs and MIs in Statistics Model | | Analysis | Feature | Minor | 4929 | 21.09.01-a |
| FFDC-10185 | Add four more virtual chambers | | General | Feature | Minor | 5000 | 21.09.01-a |
| FFDC-10184 | Import I/O into Data Dictionary | | General | Feature | Minor | 4944 | 21.09.01-a |
| FFDC-10179 | Store in Run and database the reasons for analysis suppression and rejection | | Analysis | Feature | Minor | 4983 | 21.09.00-a |
| FFDC-10175 | Show in FabGuard Web Node Summary features installed in FabGuard Node | | Web | Feature | Minor | 4996 | 21.09.01-a |
| FFDC-10172 | Show formula for String Association, Logistics Association, and Setpoint Normalization Signal Bins | Appears in Run Summary, Signal Bin description, etc. | Program UI | Feature | Minor | 4994 | 21.09.01-a |
| FFDC-10168 | SECS DLL for Shinko Seiki SPZM6121 | Has S2F41 output commands PAUSE and STOP. | Connections | Feature | Minor | 4987 | 21.09.01-a |
| FFDC-10160 | SmartFDC UI 2.0.0.1808 | User login with FabGuard credentials. User feedback to teach Anomaly models. | Web | Feature | Minor | | 21.04.05-a |
| FFDC-10155 | Modify SECS output commands for Naura eVictor v2 tool type | S2F41 output commands are now ABORT, STOP, and TRIGGERALARM, all of which are chamber-specific. | Connections | Feature | Minor | 4879 | 21.04.05-a |
| FFDC-10153 | SECS DLL for Athlete BM-1120WR | | Connections | Feature | Minor | 4957 | 21.09.01-a |
| FFDC-10144 | Use Data Age thresholds appropriate to the connection | | Acquisition | Feature | Minor | 4801 | 21.09.01-a |
| FFDC-10141 | Multiple Run selection on chamber utilization Reports | | Program UI | Feature | Minor | 4527 | 21.09.00-a |

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| FFDC-10140 | Add communication with Merlin chiller | | Gauges | Feature | Minor | 4896 | 21.09.00-a |
| FFDC-10134 | Force to restart AutoStart Service or Program from FgWeb Node Summary | Force is performed by the FabGuard Executive using remote calls rather than by the FabGuard Node, thus this can be done if FabGuard Node is not running. | Web | Feature | Minor | | 21.04.05-a |
| FFDC-10133 | Display KPI definitions in web | | Web | Feature | Minor | | 21.04.05-a |
| FFDC-10129 | Add Anomaly feedback UI to FabGuard application | Accessible from a Drilldown: Anomaly Time Series Envelope Data in Anomaly Score Report. | General | Feature | Minor | | 21.04.05-a |
| FFDC-10127 | Add TDS3 and TDS4 | | Sensors | Feature | Minor | 4813 | 21.04.05-a |
| FFDC-10120 | Add New Tool ASM Laser 1205 | | General | Feature | Minor | 4772 | 21.09.00-a |
| FFDC-10119 | SmartFDC UI 1.3.2 | Eliminated the need to configure the database connection. Made the sort order on the lot list be remembered. | Web | Feature | Minor | | 21.04.00-r, 21.04.04-a |
| FFDC-10115 | Indicator name in Analysis Health Summary | Allow filtering and display based on qualified Indicator name. A qualified name includes step number and model name is applicable. | General | Feature | Minor | | 21.04.05-a |
| FFDC-10112 | Add New Tool YES PB450 | | General | Feature | Minor | 4769 | 21.04.05-a |
| FFDC-10111 | Add specific analysis information to the database Audit table | A separate column to hold Report History name and anomaly model Bin/Step information. Also a separate column to hold chamber number. | Database | Feature | Minor | | 21.04.05-a |
| FFDC-10110 | SECS output commands for Naura eVictor v2 tool type | Uses the SECS DLL for Naura ILink 300. Has S2F41 output commands Stop, PauseTool, and AbortTool. | Connections | Feature | Minor | 4879 | 21.04.04-a |
| FFDC-10105 | Sort Tool Group and Acquisition Group tool selection in alphabetical order | | General | Feature | Minor | 4872 | 21.04.03-a |
| FFDC-10103 | Global preference for Web KPI calculations have a limited user selection of Acquisition trigger | Previously, user could select combination of Acquisition trigger and the selection was used for all KPI calculations. Now user can only select all or product (Acquisition 1 and 2) and the selection only applies to Process KPIs. | Web | Feature | Minor | | 21.04.04-a |
| FFDC-10102 | Remove from web KPI calculations a choice of Process vs Substrate | Web KPIs shown at the top of every page are only be based on processes where applicable, not on substrates. Detail table shows KPIs based on process and substrate. | Web | Feature | Minor | | 21.04.04-a |
| FFDC-10101 | Renamed Chamber Type labels to indicate which chambers are used for rollup to tool level for process KPIs | Previously the labels only referred to throughput, and not all process KPIs | Program UI | Feature | Minor | | 21.04.04-a |
| FFDC-10100 | Rename "Acquisition 1 (main process)" and "Acquisition 1 (auxiliary process)" to "Acquisition 1 (main product)" and "Acquisition 1 (auxiliary product)" to | Use of the word product is more compatible with FabGuard and ARAMS states. | Program UI | Feature | Minor | | 21.04.04-a |
| FFDC-10095 | Add New tool TEL Lithius Pro Z | | General | Feature | Minor | 4361 | 21.09.00-a |
| FFDC-10093 | SECS DLL for Takatori AMR-2200G | Has S2F41 output command STOP. | Connections | Feature | Minor | 4544 | 21.04.05-a |
| FFDC-10088 | Allow FabGuard Recipe Name, as well as Recipe Path and Name, to be used in color, axis, custom group, and include/exclude | To distinguish on the plot and yet not show the full path because it is too long, the full path is replace with "Path\" prefix. | General | Feature | Minor | 4836 | 21.04.03-a |
| FFDC-10082 | Add Sequence ID to History split | Modifies the SPCS Report and Analysis Health Reports. | Analysis | Feature | Minor | 4795 | 21.04.05-a |
| FFDC-10080 | When Resolving Bins from Acquisition Dictionary, preferentially keep resolved Bins | After resolution from Acquisition Dictionary, if there are multiple Bins that have the same IDs, keep the resolved Bin and set the unresolved Bin to be a Placeholder. Previously, the second Bin was always set to be a Placeholder. | Acquisition | Feature | Minor | | 21.04.03-a |
| FFDC-10078 | Add New Tool Ulvac NE-7800 V2 | | General | Feature | Minor | 4700 | 21.04.03-a |
| FFDC-10071 | SmartFDC UI 1.2.0 | Speed up the clustering mechanism, improve the display of clusters, improve the handling of time zones, improve the dialogs for hiding and marking lots for follow-up, and add pagination to the lot list. | Web | Feature | Minor | | 21.04.00-n, 21.04.03-a |
| FFDC-10069 | Add New Tool Ulvac NA8000 | | General | Feature | Minor | 4698 | 21.04.03-a |
| FFDC-10068 | Add 115200 baud rate to Aera 78 series MFC | | Gauges | Feature | Minor | 4145 | 21.09.00-a |
| FFDC-10066 | SECS DLL for ASM Mapping Sorter | | Connections | Feature | Minor | 4773 | 21.04.05-a |
| FFDC-10065 | SECS DLL for ASM Laser 1205 | | Connections | Feature | Minor | 4772 | 21.04.05-a |
| FFDC-10064 | SECS DLL for YES PB450 | Has S2F41 output command ABORT_PROCESS. | Connections | Feature | Minor | 4769 | 21.04.05-a |
| FFDC-10063 | Support for National Instruments NI 9228 | Used with a cDaq chassis. | Connections | Feature | Minor | 4797 | 21.04.03-a |
| FFDC-10062 | Support for National Instruments NI 9263 | Used with a cDaq chassis. | Connections | Feature | Minor | 4719 | 21.04.03-a |
| FFDC-10058 | Add New Tool Ulvac NE550 | | General | Feature | Minor | 4699 | 21.04.03-a |
| FFDC-10053 | Allow checking of the response in HTTP I/O Event output messages | Only applies to XML messages, requires configuration of Path and Response are in the I/O Event output channel. Event failure Alarm generate if Path is not found or Response does not match. See FabGuard log for more details. | I/O Channels | Feature | Minor | 4336 | 21.04.03-a |
| FFDC-10051 | Add New Tool Showa Chemical QDR | | General | Feature | Minor | 4696 | 21.04.03-a |
| FFDC-10040 | SECS output commands for Ulvac Gemini-200E, NA8000, and NE-7800 tool types | Uses the SECS DLL for Ulvac Gemini-200E. Has S2F41 output command CANCEL for ports 1 through 4. | Connections | Feature | Minor | | 21.04.03-a |
| FFDC-10039 | More consistent data for KPIs in FabGuard web | | Program UI | Feature | Minor | | 21.04.03-a |
| FFDC-10035 | Add New Tool Ulvac Gemini-200E V2 | | General | Feature | Minor | 4702 | 21.04.03-a |
| FFDC-10032 | Add New Tool PFSC E620R | | General | Feature | Minor | 4695 | 21.04.02-a |
| FFDC-10028 | Allow analyses shown in a grid to be filtered in Active Analysis dialog | Add filter row | Program UI | Feature | Minor | 4703 | 21.04.02-a |
| FFDC-10027 | Add Executive column to Fab Detail tables in web | | Web | Feature | Minor | | 21.04.02-a |
| FFDC-10026 | Add New Tool Ushio UX-44775C | | General | Feature | Minor | 4701 | 21.04.02-a |
| FFDC-10021 | Augment ALTX in S5F1 received from tool for certain SECS DLLs | This is intended for tools that provide alarm information in their SECS manual that is not included in ALTX, This is currently implemented for the SECS DLLs "Axcelis (Eaton) NV-6200A" and "Tegal 9XX". | Connections | Feature | Minor | 4605 | 21.04.02-a |
| FFDC-10019 | SECS DLL for Centrotherm Rapid 200 (Peer Group) | | Connections | Feature | Minor | 4688 | 21.04.02-a |
| FFDC-10018 | SECS DLL for PacTech PaLine 300 A50 | | Connections | Feature | Minor | 4687 | 21.04.02-a |
| FFDC-10014 | Add New Tool Nile Technologies Lynx 150 | | General | Feature | Minor | 4585 | 21.04.02-a |

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| FFDC-10010 | Improve the algorithm used for prediction | Improved algorithm uses both last 5 point projection and EWMA fitting to choose the most robust prediction, while giving more weight to the latest values. | Analysis | Feature | Minor | | | 21.04.02-a |
| FFDC-10009 | Add Augent OPG550 sensor commands for firmware version 1.00.03 | | Sensors | Feature | Medium | | | 21.04.02-a |
| FFDC-10006 | SECS DLL for Hylax Technology | Has output commands S2F41 STOP and ABORT. | Connections | Feature | Minor | 4366 | | 21.04.02-a |
| FFDC-10002 | Improve file save speed by minimizing number of writes | | General | Feature | Minor | | | 21.04.02-a |
| FFDC-9999 | Chamber Utilization plot on web ignores Unknown states | | Web | Bug | Minor | | 20.08.00-a | 20.12.00-o, 21.04.00-g, 21.04.02-a |
| FFDC-9998 | Facility layout sometimes missing from web | | Web | Bug | Minor | | 20.12.04-a | 21.04.00-g, 21.04.02-a |
| FFDC-9996 | RVS DLL for CSOT2&3 should ignore case of incoming MESSAGE_ID | | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-g, 21.04.02-a |
| FFDC-9995 | Should not send BoardRightAngle set command to the RGA | | Sensors | Bug | Minor | 4641 | 21.04.01-a | 21.04.01-b, 21.04.02-a |
| FFDC-9994 | Compensate for the changes in version returned by the RGA firmware 1.8.0 and higher | | Sensors | Bug | Medium | | 20.12.00-a | 20.12.00-o, 21.04.00-g, 21.04.01-b, 21.04.02-a |
| FFDC-9991 | FabGuard should not publish TOI state transition to Processing until after the tool has accepted all commands | | TOI | Bug | Minor | | 20.12.00-a | 21.04.00-f, 21.04.01-b, 21.04.02-a |
| FFDC-9988 | When drilling down from Alarm Manager to Multi Run Viewer, Tool Alerts are not if retrieved even if the global preference to is set | | General | Bug | Medium | 4557 | 20.04.03-a | 20.08.00-v, 20.12.00-n, 21.04.00-f, 21.04.01-a |
| FFDC-9986 | Facility command using ModBus output should allow user to specify what value to write | | I/O Channels | Bug | Minor | | | 21.04.00-f, 21.04.01-a |
| FFDC-9983 | TOI for Canon i-Series/Stepper should wait 5 seconds before sending S16F11 | | TOI | Bug | Minor | | 20.12.00-a | 21.04.00-f, 21.04.01-a |
| FFDC-9982 | LDAP does not always failover to the backup server | | Security | Bug | Minor | 4604 | 17.04.05-a | 19.05.00-x, 19.09.00-r, 19.12.00-p, 20.04.00-r, 20.08.00-v, 20.12.00-n, 21.04.00-f, 21.04.01-a |
| FFDC-9981 | Modifying Reports belonging to a Model or Family removes the modified Reports from the Model or Family | | Database | Bug | Major | | 19.09.00-a | 19.09.00-r, 19.12.00-p, 20.04.00-r, 20.08.00-v, 20.12.00-n, 21.04.00-f, 21.04.01-a |
| FFDC-9977 | Metrology for Model query incorrectly filters by logistics that belong to Process table | | Analysis | Bug | Minor | | | 20.04.00-r, 20.08.00-v, 20.12.00-n, 21.04.00-e, 21.04.01-a |
| FFDC-9976 | FabGuard Node web service content type should be text/xml | Some clients cannot handle pure text content type. | Connections | Bug | Minor | 4624 | | 20.04.00-r, 20.08.00-v, 20.12.00-n, 21.04.00-e, 21.04.01-a |
| FFDC-9974 | Augent OPG550 sensor not found by FabGuard | | Installer | Bug | Minor | 4628 | 21.04.00-a | 21.04.00-e, 21.04.01-a |
| FFDC-9972 | Chamber analysis thread might not restart if Sensors are reset | | Analysis | Bug | Major | | 21.04.00-a | 21.04.00-e, 21.04.01-a |
| FFDC-9971 | It is misleading which values are shown for Average, Minimum, Maximum, etc. plots in SPC and Data View Reports when grouping is used | With Grouping selected, SPC Reports should use the SPC Chart Type to determine which values is aggregated in the group; Data View Reports should aggregate Average value. The plot names in the dropdown should indicate which value is used. | Analysis | Bug | Minor | | | 21.04.00-e, 21.04.01-a |
| FFDC-9969 | TOI Load for TEL Clean Track ACT8 should not wait for LOAD PORT LOADED event before sending S2F41 CassetteMapping | | TOI | Bug | Minor | | 21.04.00-c | 21.04.00-f, 21.04.01-a |
| FFDC-9967 | Dots on tool icon show current health not worst health 24 hours | | Web | Bug | Minor | 4589 | | 20.04.00-r, 20.08.00-v, 20.12.00-n, 21.04.00-e, 21.04.01-a |
| FFDC-9965 | 21.04.00 does not correctly read the FabGuard.scn file on upgrade from version 20.12.04 | This caused incorrect settings for SECS Polling Type, SECS Trace Separation, and several other Advanced Connections parameters, which resulted in SECS SVID data not having any values and some other problems. If a FabGuard Node was already upgraded from 20.12.04 to 21.04.00-a or 21.04.00-b or 21.04.00-c, then the Advanced Connections parameters must be fixed manually. | Connections | Bug | Major | | 21.04.00-a | 21.04.00-d |
| FFDC-9963 | RVS DLL for CSOT2&3 should treat incoming DailyCheckEndForFDC message as data from the tool | The DailyCheckEndForFDC message contains tool data, but identifies parameters by name rather than by numeric SVID. FabGuard internally requires that SVIDs have numeric values, so a custom lookup table is used to convert from the parameter names to numeric values. The file "SECS SVID List.dat" that contains this conversion is included by the FabGuard installer when this RVS DLL is selected. | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-e, 21.04.01-a |
| FFDC-9962 | No Audit trail after editing Connection Advanced parameters in FabGuard Client | | Security | Bug | Minor | 4599 | | 20.04.00-r, 20.08.00-v, 20.12.00-n, 21.04.00-d, 21.04.01-a |
| FFDC-9959 | SPC Reports with dynamic deviation chart types could be incorrect if the dynamic target is negative | | Analysis | Bug | Minor | | | 21.04.00-e, 21.04.01-a |
| FFDC-9957 | SmartFDC UI 1.1.2 | | Web | Bug | Minor | | 21.04.00-a | 21.04.00-c, 21.04.01-a |
| FFDC-9955 | Tool Alerts retrieved as part of SPC Reports do not appear if they are not assigned to a Chamber | FabGuard uses the same filter to retrieve data and alerts, but if the Alerts are not assigned to a chamber, the filters prevent retrieving these Alerts. Fix retrieves both specifically assigned alerts and unassigned Alerts. | General | Bug | Medium | 4557 | 20.04.03-a | 20.08.00-u, 20.12.00-n, 21.04.00-c, 21.04.01-a |
| FFDC-9954 | "Target Shift on Next Process" in Active Analysis ignores minimum configured user security | | Security | Bug | Medium | 4588 | 20.08.00-a | 20.08.00-u, 20.12.00-n, 21.04.00-c, 21.04.01-a |
| FFDC-9950 | For analog inputs to RGAs, the Signal Type could revert to Linear when using Sensor Configuration Hardware | | Sensors | Bug | Minor | 4245 | | 20.04.00-r, 20.08.00-u, 20.12.00-n, 21.04.00-c, 21.04.01-a |
| FFDC-9944 | TOI Load for TEL Clean Track ACT8 should include S2F41 CassetteMapping | | TOI | Bug | Minor | | 20.12.01-a | 21.04.00-c |
| FFDC-9943 | Report Suppress does not update the Active Analysis display to show suppression time | | Program UI | Bug | Minor | | | 21.04.00-c, 21.04.01-a |
| FFDC-9942 | Entering Sensor Configuration Monitor screen for CIS2 RGA causes program to crash | | Sensors | Bug | Minor | 4576 | | 20.04.00-r, 20.08.00-u, 20.12.00-n, 21.04.00-c, 21.04.01-a |
| FFDC-9941 | OPC UA Browse (force) incorrectly removes the connection | | General | Bug | Minor | | 21.04.00-a | 21.04.00-c, 21.04.01-a |

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| FFDC-9940 | FabGuard Node could crash if it received a TOI API request for an invalid port number | | TOI | Bug | Minor | | 19.12.00-a | 19.12.00-p, 20.04.00-r, 20.08.00-u, 20.12.00-n, 21.04.00-c, 21.04.01-a |
| FFDC-9936 | In TOI Provision Only, some tools go to "SECS Error" rather than "Successful Provision" | | TOI | Bug | Minor | | | 21.04.00-f, 21.04.01-a |
| FFDC-9934 | SmartFDC UI 1.1.1.1 | | Web | Bug | Minor | | 21.04.00-a | 21.04.00-b, 21.04.01-a |
| FFDC-9933 | Partitioned SQL Server could have partitions that are larger than one day | This could have affected query performance. This fix does not change old partitions, but should prevent the problem in new partitions. Running the SQL Server script is necessary to get this fix. Oracle and Postgres are not affected by this bug. | Database | Bug | Minor | | | 21.04.00-b, 21.04.01-a |
| FFDC-9926 | Resolution of an Alias Bin which results in a duplicate Bin can prevent acquisition | A bin is a duplicate if after resolution it has the same ID (SVID, etc.) as an already existing Bin. | Acquisition | Bug | Minor | 4559 | | 21.04.00-b |
| FFDC-9924 | Revert FFDC-9879 "Column name anom_w_result_en_distance_sum_out in lot table is too long" for 20.08.00 and 20.12.00 | We decided to revert FFDC-9879 for 20.08.00 and 20.12.00 because it was too large a change to be practical in existing production versions. It was too large a change because it required updating all FabGuard Nodes and Executive, and running the updated Oracle or Postgres or SQL Server script. Note that FFDC-9879 was added in versions 20.08.00-s, 20.12.00-k, and 21.04.00-a; it is staying in 21.04.00. | Database | Bug | Medium | | 20.08.00-s | 20.08.00-t, 20.12.00-m |
| FFDC-9922 | User should be able to configure presence/absence of inlet and auxiliary heaters for (Harsh) CPM APX | | Sensors | Bug | Minor | 4374 | | 21.04.00-b |
| FFDC-9921 | FabGuard could get stuck ending Run for IRAD sensor | | Sensors | Bug | Medium | | 20.04.01-a | 20.08.00-t, 20.12.00-m, 21.04.00-a |
| FFDC-9919 | WD BPI XML Importer should properly import Extra7 and Extra8 logistics | | General | Bug | Minor | 4537 | | 19.12.00-p, 20.04.00-r, 20.08.00-t, 20.12.00-m, 21.04.00-b |
| FFDC-9913 | ASE importer should compensate for missing time | | Acquisition | Bug | Minor | | 20.12.00-a | 20.12.00-l, 21.04.00-a |
| FFDC-9911 | FabGuard Analysis Server incorrectly assigns Chamber ID and does not perform Chamber ID lookup | | Acquisition | Bug | Medium | | 20.12.00-a | 20.12.00-l, 21.04.01-a |
| FFDC-9910 | Anomaly Scores Report incorrect label | Replace "Figure of Merit" with "Bin Name" and allow for custom coloring. | Program UI | Bug | Minor | | | 21.04.00-b, 21.04.01-a |
| FFDC-9907 | SPC Reports generate error for SQL Server database if query logging is enabled | The error is "No column name was specified for column 1 of 'subquery_local'". No data is retrieved when this error occurs. | Database | Bug | Minor | 4513 | 19.09.00-a | 19.09.00-r, 19.12.00-p, 20.04.00-r, 20.08.00-t, 20.12.00-l, 21.04.00-a |
| FFDC-9906 | "Value not valid" trigger error can happen in I/O Channels that get Secondaries from CEIDs | Problem can occur if the Channel copied but not edited, or if the Secondary I/O Channels comes from Acquisition Dictionary. | I/O Channels | Bug | Minor | 4503 | | 19.05.00-w, 19.09.00-r, 19.12.00-p, 20.08.00-t, 20.12.00-l, 21.04.00-a, 21.04.01-a |
| FFDC-9903 | Chamber Utilization plot on web is incorrect with large amounts of data | | Web | Bug | Minor | | 19.09.00-a | 21.04.00-a |
| FFDC-9899 | Deleting user entered Audit entry in the Report does not work for Postgres database | | Database | Bug | Minor | | | 19.05.00-w, 19.09.00-r, 20.04.00-r, 20.08.00-t, 20.12.00-k, 21.04.00-a |
| FFDC-9898 | Locking Reports and Models does not work for Postgres database | | Database | Bug | Medium | | 20.12.00-a | 20.12.00-k, 21.04.00-a |
| FFDC-9897 | Harsh CPM heaters display | | Program UI | Bug | Minor | 4464 | | 21.04.00-a |
| FFDC-9895 | JSON library crashes with non UTF-8 characters | | General | Bug | Minor | | | 20.08.00-z, 20.12.00-q, 21.04.00-a |
| FFDC-9889 | Switching RGA filament between A and B does not work | | Sensors | Bug | Minor | 4484 | 20.12.01-a | 21.04.00-a |
| FFDC-9887 | Analysis Server does not wait for caches to load before processing files | | Analysis | Bug | Minor | 4479 | | 19.05.00-w, 19.09.00-r, 19.12.00-p, 20.04.00-q, 20.08.00-s, 20.12.00-k, 21.04.00-a |
| FFDC-9884 | Multi Tool I/O Channel Manager does not update the FabGuard IPMs for deleted I/O Channels | Update was performed if some other Channel was edited or added. | General | Bug | Minor | 4473 | | 19.09.00-r, 19.12.00-p, 20.04.00-q, 20.08.00-s, 20.12.00-k, 20.12.04-b, 21.04.00-a |
| FFDC-9883 | TOI for CUON Detaper should use CEIDs 1112-1115 for Process Started/Complete | | TOI | Bug | Minor | 4084 | 19.05.03-a | 20.12.00-k, 21.04.00-a |
| FFDC-9881 | SmartFDC UI 1.0.2 | | Web | Bug | Minor | | 20.12.04-a | 20.12.04-b |
| FFDC-9879 | Column name anom_w_result_en_distance_sum_out in lot table is too long | This probably only affected Oracle databases with version below 12.2. However, this change requires both upgrading FabGuard Nodes and Executive, and running the updated Oracle or Postgres or SQL Server script. If SmartFDC is used, it must be upgraded also. | Database | Bug | Medium | | 20.04.03-a | 20.08.00-s, 20.12.00-k, 20.12.04-b, 21.04.00-a |
| FFDC-9878 | Output of non-facility time series data via HTTP does not work | | General | Bug | Minor | | 20.12.03-a | 20.12.04-b, 21.04.00-a |
| FFDC-9876 | Miscellaneous web bugs | | Web | Bug | Minor | | 20.12.03-a | 21.04.00-a |
| FFDC-9873 | Show Details checkbox missing for Analysis Node and Analysis Server | | Web | Bug | Minor | | 20.12.03-a | 21.04.00-a |
| FFDC-9870 | Memory leak in Executive if any Nodes have duplicate IP address | | Executive | Bug | Medium | | | 19.05.00-w, 19.09.00-r, 19.12.00-p, 20.04.00-q, 20.08.00-s, 20.12.00-k, 20.12.04-a |
| FFDC-9868 | Global preference URLs for input and output web services do not work as intended | The URLs make an assumption that is not likely to be satisfied. | I/O Channels | Bug | Minor | 4456 | | 20.04.00-q, 20.08.00-s, 20.12.00-k, 20.12.04-a |
| FFDC-9862 | Maintenance threshold is calculated with low precision from percent to target | Due to low precision of the calculation the threshold value is not quite the same as the actual threshold in the Report. Moving the calculation to Executive from the Web, significantly increases the precision of the threshold. | Web | Bug | Minor | 4446 | | 20.08.00-s, 20.12.00-j, 20.12.04-a |
| FFDC-9858 | I/O channel Secondary with placeholder connection type creates a unremovable Bin in a Recipe | | I/O Channels | Bug | Medium | 4419 | | 20.04.00-q, 20.08.00-s, 20.12.00-j, 20.12.04-a |
| FFDC-9857 | TOI for Aviza fxP, and SPTS CVE_c2L, DSI_V, Sigma should set ECIDs 1012 and 1013 to FALSE | If these ECIDs are FALSE, then Port Numbers are reported as 1-based, which is what FabGuard assumes. | TOI | Bug | Minor | 4418 | | 20.08.00-s, 20.12.00-k, 21.04.00-a |
| FFDC-9856 | Incorrect treatment of 12 AM time for imported files | | General | Bug | Medium | 4413 | | 19.05.00-w, 19.09.00-r, 19.12.00-p, 20.04.00-q, 20.08.00-s, 20.12.00-j, 20.12.04-a |

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| FFDC-9855 | Protect against "Encountered an improper argument" | This could occur only in FabGuard Nodes when loading or saving Recipes or Runs and only if the file was on the local computer in a folder that had inconsistent share name and directory junction. | General | Bug | Minor | 2957 | | 19.05.00-w, 19.09.00-r, 19.12.00-p, 20.04.00-q, 20.08.00-s, 20.12.00-j, 20.12.04-a |
| FFDC-9854 | Some Alarms may not be shown in Active Alarms | | Program UI | Bug | Medium | | 20.12.03-a | 20.12.04-a |
| FFDC-9848 | Protect against "The parameter is incorrect" | | General | Bug | Medium | 4429 | | 19.05.00-w, 19.09.00-r, 19.12.00-p, 20.04.00-q, 20.08.00-r, 20.12.00-l, 20.12.04-a |
| FFDC-9846 | TOI for SSEC M3303 and SSEC 3305 should use "Production.hnd" for HandlerRecipe if Extra1 is empty | | TOI | Bug | Minor | 3910 | 17.10.04-a | 20.12.00-i, 20.12.04-a |
| FFDC-9843 | TOI for Aviza fxP and SPTS CVE c2L, Dsi-V, Sigma should add 1 to Port number reported in VID 6102 | | TOI | Bug | Minor | 4418 | | 20.08.00-r, 20.12.00-i, 20.12.04-a |
| FFDC-9842 | TOI for AMAT 200mm Centura/Endura/Producer should use CEIDs 847 and 434 in addition to 819 and 437 | | TOI | Bug | Minor | 4418 | | 20.08.00-r, 20.12.00-i, 20.12.04-a |
| FFDC-9841 | RGA Hardware configuration will not allow user to select 1000 torr CDG process gauge | | Sensors | Bug | Minor | 4414 | 20.12.00-a | 20.12.00-i, 20.12.02-b, 20.12.03-a |
| FFDC-9838 | TOI for DISCO DFG8560 and DGP8761 should not wait for PP SELECTED event | | TOI | Bug | Minor | 4410 | | 20.08.00-r, 20.12.00-i, 20.12.04-a |
| FFDC-9834 | Facility not updated correctly in web | | Web | Bug | Minor | | 20.12.02-a | 20.12.03-a, 20.12.04-a |
| FFDC-9833 | Harsh CPM Aux Heater incorrect temperature | | Sensors | Bug | Minor | 4373 | | 20.12.00-h, 20.12.02-b, 20.12.03-a |
| FFDC-9822 | Executive could crash when running a Report task that creates a PDF file | | Executive | Bug | Major | | | 20.04.00-q, 20.08.00-r, 20.12.00-h, 20.12.02-b, 20.12.03-a |
| FFDC-9821 | Fault and MSO messages to to FPS should contain Fault Code information | | Connections | Bug | Minor | | | 20.12.00-h, 20.12.02-b, 20.12.03-a |
| FFDC-9819 | FabGuard should send Harsh-CPM-specific commands only to Harsh-CPM genus RGAs | | Sensors | Bug | Minor | | 20.12.00-a | 20.12.00-h, 20.12.01-a |
| FFDC-9813 | Navigating to "Tools not in any group" causes browser to hang | | Web | Bug | Minor | | 20.12.00-a | 20.12.00-h, 20.12.02-b, 20.12.03-a |
| FFDC-9812 | Security Audit report has all columns in Data Table (except Time) duplicated | | General | Bug | Minor | | | 20.12.00-h, 20.12.02-b, 20.12.03-a |
| FFDC-9811 | TOI Slotmap for AMAT 200mm Centura/Endura/Producer does not work if SlotMap contains multiple slot groups with the same PPID | | TOI | Bug | Minor | | 20.12.00-a | 20.12.00-h, 20.12.02-b, 20.12.03-a |
| FFDC-9806 | TOI for some tools could potentially miss transition from "Waiting for 'PROCESS STARTED' event" to "Waiting for 'PROCESS COMPLETE' event" | This was not necessarily a problem for any specific tool, but could affect the tool types: AMAT Centura/Endura/Producer 200mm, SSEC M3303/3305, NEXX Stratus, PSK DAS 2000, AMAT Nokota, NTEC BW227 7FA, Disco DFG8560/DGP8761, AMAT MirraMesa 200mm. | TOI | Bug | Minor | | | 20.08.00-q, 20.12.00-g, 20.12.02-a |
| FFDC-9798 | State and duration plots have only outline, not filled bars | | Program UI | Bug | Minor | 4335 | 20.08.00-a | 20.08.00-q, 20.12.00-g, 20.12.02-a, 20.12.03-a |
| FFDC-9795 | Database delete task for partitioned SQL Server could leave gaps between partitions | | Database | Bug | Minor | 4205 | | 20.12.02-a |
| FFDC-9791 | TOI for several Disco tools does not correctly determine Process Start or Complete | | TOI | Bug | Minor | 4084 | 20.04.03-a | 20.08.00-q, 20.12.00-f, 20.12.02-a |
| FFDC-9789 | Alarm Drilldown incorrect time range for system alarms | Issue is only in FabGuard Client. | General | Bug | Minor | 4277 | | 20.08.00-q, 20.12.00-f, 20.12.02-a, 20.12.03-a |
| FFDC-9786 | TOI for Oxford PlasmaPro 100 RIE should wait for MAPPING_FINISHED before sending S2F41 EVACUATE | | TOI | Bug | Minor | | 20.12.01-a | 20.12.02-a |
| FFDC-9783 | TOI for TEL Clean Track ACT8 might not work correctly | | TOI | Bug | Minor | | 20.04.03-a | 20.08.00-q, 20.12.00-f, 20.12.02-a |
| FFDC-9778 | TOI should treat "SlotMap provided, but no slots have a recipe" as an error | | TOI | Bug | Minor | | | 20.04.00-q, 20.08.00-q, 20.12.00-f, 20.12.02-a |
| FFDC-9775 | RFS100 not calculating special RF functions in Signal Bins | | Analysis | Bug | Medium | 4329 | 20.08.00-a | 20.08.00-q, 20.12.00-f, 20.12.02-a |
| FFDC-9766 | TOI Slotmap for AMAT 200mm Centura/Endura/Producer should not assume that SlotMap has contiguous slots | | TOI | Bug | Minor | | 20.12.00-a | 20.12.00-f, 20.12.02-a |
| FFDC-9765 | TOI for several Disco tools sends Port in S2F41 in U1 format rather than Binary format | | TOI | Bug | Minor | 4084 | 20.04.03-a | 20.08.00-q, 20.12.00-e, 20.12.02-a |
| FFDC-9761 | Displayed TOI State should be consistent with Provision and Start option | Previously, if Provision and Start was used, then the TOI State displayed in the TOI user interface and returned by the Retrieve TOI State API attempted to reflect whether the tool was actually provisioning or starting. However, for many tools this was an arbitrary distinction and was not consistently applied. Now, the TOI State matches the label of the Provision or Start button. | TOI | Bug | Minor | | | 20.12.02-a |
| FFDC-9760 | Multi - Tool Recipe Plan Manager Output Path does not show global path | | Program UI | Bug | Minor | 4308 | | 20.12.00-e, 20.12.02-a |
| FFDC-9755 | Web refresh redraws the facility status pane | | Web | Bug | Minor | | | 20.12.02-a |
| FFDC-9751 | TOI user interface should automatically update if Preference for Connection Type is changed | | TOI | Bug | Minor | 4084 | | 19.12.00-o, 20.04.00-p, 20.08.00-p, 20.12.00-e, 20.12.02-a |
| FFDC-9750 | TOI user interface should show only 2 load ports for tool type "SSEC M3303" | | TOI | Bug | Minor | 3910 | 17.10.04-a | 20.08.00-p, 20.12.00-e, 20.12.02-a |
| FFDC-9749 | TOI for some tools can miss transition from "Waiting for 'PROCESS STARTED' event" to "Waiting for 'PROCESS COMPLETE' event" | This affects the tool types: Aviza fxP, SPTS CVE c2L, SPTS Dsi-V, SPTS Sigma. | TOI | Bug | Minor | 4298 | 20.08.00-o | 20.08.00-p, 20.12.00-e, 20.12.02-a |
| FFDC-9748 | TOI fixes for Oxford PlasmaPro 100 RIE, Evatec CLN200II, TEL Clean Track ACT8, Canon i-Series/Stepper | | TOI | Bug | Minor | | 20.12.01-a | 20.12.02-a |
| FFDC-9746 | Manual acquisition with an RGA recipe of a different amu range then the target RGA will crash | | Acquisition | Bug | Medium | | | 20.12.02-a |

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| FFDC-9745 | Connection Advanced swaps field between FabGuard Node and FabGuard Client | Swapped parameters are: "Continue acquiring data after the end of Recipe" and "Ignore data older than Data Age threshold". | General | Bug | Medium | 4134 | 18.11.02-a | 19.05.00-v, 19.09.00-q, 19.12.00-o, 20.04.00-p, 20.08.00-p, 20.12.00-d, 20.12.02-a |
| FFDC-9730 | TOI should enter Processing state when tool has accepted all commands | | TOI | Bug | Minor | 4047 | | 20.08.00-o, 20.12.00-d, 20.12.01-b, 20.12.02-a |
| FFDC-9728 | Automatic Acquisition Group deploy may not properly get Tool Groups list | Not getting the Tool Group list may prevent display of all the deploy target FabGuard Nodes. Only effects FabGuard Clients started from the web directly into Acquisition Setup dialog. | General | Bug | Minor | | | 20.04.00-p, 20.08.00-o, 20.12.00-d, 20.12.02-a |
| FFDC-9725 | TOI for Perkin-Elmer Micalign 600 should skip Mask Load if Extra1 is empty | | TOI | Bug | Minor | | 20.04.03-a | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9724 | Lock All Recipes button in Automated Acquisition Manager incorrectly labels the first choice as Engineering Lead | | Program UI | Bug | Minor | | 19.09.00-a | 19.09.00-q, 19.12.00-o, 20.04.00-p, 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9722 | Examiner Security Access does not permit examining a Recipe or I/O channel | | Security | Bug | Minor | 4274 | 20.04.00-a | 20.04.00-p, 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9718 | Web can't display background image from another Executive | | Web | Bug | Minor | | | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9717 | Remove TOI state time out | The TOI state time out was intended to automatically switch back to Ready if FabGuard was waiting for the tool to do something for too long. However, this could cause FabGuard to time out too early if the tool was taking longer than expected, but still working correctly. | TOI | Bug | Minor | 4084 | 18.11.03-a | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9716 | TOI Slotmap for AMAT 200mm Centura/Endura/Producer should send S3F13 before S2F65 | | TOI | Bug | Minor | | 20.12.00-a | 20.12.01-b, 20.12.02-a |
| FFDC-9715 | TOI for EVG Gemini does not correctly determine which VIDs to use | | TOI | Bug | Minor | | 20.04.03-a | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9712 | TOI user interface in FabGuard Web has incorrect color and wording for some states for some tools | | TOI | Bug | Minor | 4047 | 20.04.03-a | 20.08.00-o, 20.12.00-d, 20.12.01-b, 20.12.02-a |
| FFDC-9707 | TOI Slotmap does not work for AMAT 200mm Centura/Endura/Producer | The S2F65 message was not formatted correctly. | TOI | Bug | Minor | | 20.12.00-a | 20.12.00-d, 20.12.01-a |
| FFDC-9701 | Global preference for 'Number of hours since Substrate Start for display' is not ignored if set to 0 | | Web | Bug | Minor | | | 20.04.00-p, 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9700 | Serial ModBus should support Function Code 4 | User interface allows adding (4) in the Register field. | Program UI | Bug | Medium | 4213 | 20.08.00-a | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9694 | Analysis Server imported Alerts do not have the Tool ID from the import | | General | Bug | Minor | 4082 | 20.08.00-a | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9692 | TOI state transitions do not work correctly for tools that do not identify which port an event is for | The intended behavior is to make a good guess as to which port the event is for, but the guess was not correct for port numbers greater than 1. | TOI | Bug | Minor | | 20.08.01-a | 20.12.00-d, 20.12.01-a |
| FFDC-9691 | Task history might not be displayed correctly for SQL Server database | | Database | Bug | Minor | | | 21.04.00-z, 21.09.00-a |
| FFDC-9688 | In Help, link to Options Table Setup for single entry fault code section of topic Output Tab does not work | | General | Bug | Minor | | 20.08.00-a | 20.08.00-n, 20.12.00-d, 20.12.01-a |
| FFDC-9686 | Node Summary in web does not follow Remote Logout minimum Security Level | | Web | Bug | Minor | 4235 | 20.08.00-a | 20.08.00-o, 20.12.00-d, 20.12.01-a |
| FFDC-9685 | TOI for Oxford Instruments PlasmaPro 100 RIE should include BatchID instead of LotID in S2F41 PP-SELECT | | TOI | Bug | Minor | | 20.12.00-c | 20.12.00-d, 20.12.01-a |
| FFDC-9683 | TOI for NEXX Apollo might not correctly transition to Process Complete state | | TOI | Bug | Minor | | 20.04.03-a | 20.08.00-n, 20.12.00-d, 20.12.01-a |
| FFDC-9682 | In TOI for Novellus Concept 2 and 3, change transitions to use polled SVIDs rather than CEIDs | This is a workaround for some Novellus tools that do not send S6F11 messages for the CEIDs needed to determine when lot processing starts or finishes. These tools accept the S2F37 message to enable these CEIDs, but never send the S6F11 message when the event occurs. | TOI | Bug | Minor | | 20.04.03-a | 20.08.00-n, 20.12.00-d, 20.12.01-a |
| FFDC-9678 | Do not allow users to enter same IP address for HMI Facility Fab and Sub-fab | | Program UI | Bug | Minor | | 20.12.00-c | 20.12.00-d, 20.12.01-a |
| FFDC-9677 | Warn if Task Execution Time in Global Preferences is less than 20 minutes | | Executive | Bug | Medium | | 20.12.00-c | 20.12.02-a |
| FFDC-9675 | Change InstallShield so it does not sign files in place | This is a workaround for a problem with InstallShield that it does not install some .exe and .dll files on some computers when it signed those files in place. | Installer | Bug | Major | | 20.08.00-m | 20.08.00-n, 20.12.00-c, 20.12.01-a |
| FFDC-9674 | Database delete task does not delete from process table for SQL Server | If an SQL Server database has already been upgraded to 20.04.01 or higher, fixing this requires manually recreating the table _stage_process. Oracle and Postgres are not affected by this bug. | Database | Bug | Minor | | 20.04.01-a | 20.08.00-n, 20.12.00-c, 20.12.01-a |
| FFDC-9672 | File import inserts an extra "\" in the Run file path if there is no Chamber ID | Does effect saving the data to correct directory. | Program UI | Bug | Minor | | | 19.05.00-v, 19.09.00-q, 19.12.00-o, 20.04.00-p, 20.08.00-p, 20.12.00-d, 20.12.02-a |
| FFDC-9671 | TOI for Oxford Instruments PlasmaPro 100 RIE should not include BatchID in S2F41 PP-SELECT | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-c, 20.12.01-a |
| FFDC-9670 | TOI for Oxford Instruments PlasmaPro 100 RIE should have two Load Ports | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-c, 20.12.01-a |
| FFDC-9669 | Multi Report Grid editor will not allow exit if multiple Reports have the same issue | The dialog shows a warning, but will not let the user continue. | Program UI | Bug | Minor | 4222 | | 20.12.00-c |
| FFDC-9668 | Multi Report Grid editor crash if Report is excluded | | Program UI | Bug | Minor | 4222 | | 20.12.00-c, 20.12.01-a |
| FFDC-9665 | Group Layout with many nodes shows overlapping icons | | Web | Bug | Minor | 4214 | 20.12.00-a | 20.12.00-b, 20.12.01-a |
| FFDC-9664 | Fab Layout shows "Executive does not respond" if network by IP | | Web | Bug | Minor | 4214 | 20.12.00-a | 20.12.00-b, 20.12.01-a |
| FFDC-9661 | Web shows tabs on browser hard refresh with Executive off | | Web | Bug | Minor | | 20.12.00-a | 20.12.00-b, 20.12.01-a |
| FFDC-9659 | "Alarm Analysis Message" IO output channels do not send SECS message to HOST on Alarm Clear | | Connections | Bug | Minor | | 20.08.01-a | 20.12.00-b, 20.12.01-a |
| FFDC-9657 | SECS DLL for Host Visionox V3 should not require leading 0 in SVID for chamber numbers less than 10 | | Connections | Bug | Minor | 4067 | 20.12.00-a | 20.12.00-b, 20.12.01-a |

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| FFDC-9655 | TOI for 200mm Centura, Endura, and Producer does not correctly determine lot start and lot complete | | TOI | Bug | Minor | 4084 | 20.04.03-a | 20.08.00-n, 20.12.00-a |
| FFDC-9648 | Model editor crashes after switching from "Filters Test" to "Filter Train and Apply" | | Program UI | Bug | Minor | 3985 | 20.04.03-a | 20.08.00-n, 20.12.00-a |
| FFDC-9647 | TOI for Ebara EPO-222 uses incorrect RPTID | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9646 | TOI for Ebara FREX-200 uses incorrect RPTID | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9645 | TOI for Gasonics PEP L3510 Asher uses incorrect RPTID | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9644 | TOI for TEL Unity should treat events for both Job End and Lot End as meaning process complete | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9643 | TOI does not enable events for tools that do not require reports for any event | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9642 | TOI does not correctly define reports under some conditions | | TOI | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9641 | ISM Ballzers importer should trim spaces from time column | | General | Bug | Minor | 4186 | 20.04.00-g | 20.04.00-o, 20.08.00-m, 20.12.00-a |
| FFDC-9637 | TOI for 200mm Centura and Endura should use either GEM or Legacy CEIDs to determine lot start and lot complete | The bug was that only GEM CEIDs were used and these did not work on tools that were configured as non-GEM/Legacy. | TOI | Bug | Minor | 4084 | 20.04.03-a | 20.08.00-l, 20.12.00-a |
| FFDC-9636 | TOI does not work correctly if there are spaces in PPID received from MES via SQL or HTTP | This bug caused only the part of PPID before the first space to be used in SECS messages sent to the tool. This bug did not exist if the MES Connection Type was PROMIS HTTP. | TOI | Bug | Minor | 3910 | 19.05.02-a | 19.09.00-q, 19.12.00-o, 20.04.00-o, 20.08.00-l, 20.12.00-a |
| FFDC-9634 | Fault Comment larger than 500 characters causes error inserting into Alarm table | The fix is in the database script. | Database | Bug | Minor | | 20.08.01-a | 20.12.00-a |
| FFDC-9631 | In SPC reports, Figure of Merit is unique warning is sometimes displayed unnecessarily | For History Split, a unique Figure of Merit Name should allowed if FOM Step Number or Model Name contains wild cards. | General | Bug | Minor | | | 20.08.00-l, 20.12.00-a |
| FFDC-9621 | FabGuard Client crashes if no tool is selected when Setup button is clicked | | General | Bug | Minor | 4174 | 20.04.03-a | 20.08.04-b, 20.12.00-a |
| FFDC-9619 | Billboard Executive Layout is blank | | Web | Bug | Minor | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9618 | Single Tool Display Navigate is blank, so selecting a different tool is not possible | | Web | Bug | Minor | | 19.12.00-a | 19.12.00-o, 20.04.00-o, 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9617 | Basic Layout and Basic Tables shows empty Fab and/or Group tab | | Web | Bug | Minor | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9614 | Current Executive not listed first in Fab Layout | | Web | Bug | Minor | | 20.08.04-a | 20.12.00-a |
| FFDC-9613 | Report Category Yield and Scrap are swapped | | General | Bug | Minor | 4160 | 20.08.00-a | 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9611 | Some Logistics secondaries cannot be retrieved using all available protocols | Technology, and Extra1 to Extra 8 logistics can only be retrieved using SECS and RVS protocols. | I/O Channels | Bug | Medium | | 20.08.00-a | 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9609 | Not able to create or edit IO State definitions in a sequence | | I/O Channels | Bug | Minor | 4156 | 20.08.02-a | 20.08.04-b, 20.12.00-a |
| FFDC-9608 | Indexes on metrology and metrology_scan tables should be created as LOCAL for Oracle | This fix is in the database script. | Database | Bug | Minor | 4124 | 19.12.01-a | 20.04.00-o, 20.08.00-k, 20.12.00-a |
| FFDC-9607 | Detailed Compare in Muti Tool I/O Manager can choose incorrect channel to compare | | General | Bug | Minor | | | 19.09.00-q, 19.12.00-o, 20.04.00-o, 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9605 | TOI for Ebara EPO-222 does not correctly determine state transitions from S6F11 messages | | TOI | Bug | Minor | | 20.08.01-a | 20.12.00-a |
| FFDC-9597 | Maximum character protection for Fault Code, Fault Comment, Fault email and OCAP is not enforced in Report grid edit | The string are no longer automatically trimmed. A warning is shown so the user can decide what to remove from the string. Fault Code (500 max), Fault Comment(1000 max), Fault email(500 max) and OCAP (256 max) | Program UI | Bug | Minor | 4140 | | 20.04.00-o, 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9594 | Chamber selection in Light Theme on IFM looks incorrect | | Web | Bug | Minor | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9593 | String Association Signal Bin should set all non-associated values to NA | | Analysis | Bug | Minor | | 20.04.03-a | 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9590 | TOI for N-TEC BW227-7FA does not transition to Run Complete | | TOI | Bug | Minor | | 20.04.03-a | 20.08.00-l, 20.12.00-a |
| FFDC-9589 | New task doesn't run automatically at the first time | | Executive | Bug | Medium | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9587 | Facilities Alarm icon not in correct location | | Web | Bug | Minor | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9586 | Light Theme "Controlled by Fab" buttons are not visible | | Web | Bug | Minor | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9582 | FabGuard does not correctly determine that CPM pumpdown or shutdown have finished | | Acquisition | Bug | Medium | 4157 | 20.04.00-a | 20.04.00-o, 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9577 | InstallAndConfigureIS installer does not work on Windows 7 or Windows Server 2008R2 | | Installer | Bug | Minor | | 18.11.00-a | 19.09.00-q, 19.12.00-o, 20.04.00-o, 20.08.00-j, 20.12.00-a |
| FFDC-9576 | Loading runs in Web are not working | | Web | Bug | Minor | | 20.08.04-a | 20.08.04-b, 20.12.00-a |
| FFDC-9575 | Fault I/O is not correct on FgWeb Alarm drilldown | | Web | Bug | Minor | | 19.09.00-a | 19.09.00-q, 19.12.00-o, 20.04.00-o, 20.08.00-k, 20.08.04-b, 20.12.00-a |
| FFDC-9572 | TOI incorrectly links RPTIDs that have not been defined for some tool types | This caused an error that prevented TOI from continuing. | TOI | Bug | Medium | 4084 | 20.04.03-a | 20.08.00-j, 20.12.00-a |
| FFDC-9232 | Archive Cleanup task does not delete runs for file importer, as well as Analysis Server and Analysis Node | | Executive | Bug | Minor | | | 21.04.00-ae, 21.09.00-e, 22.01.00-a |
| FFDC-9164 | TOI for Oxford Instruments Plasma Pro 100 should not include BatchID in S2F41 PP-SELECT | | TOI | Bug | Minor | 3737 | 20.04.01-a | 20.04.02-a, 20.08.00-q, 20.12.00-f, 20.12.02-a |
| FFDC-10874 | FOMs obtained as part of "Acquisition Stop Current Acquisition" trigger are not put into the Run | The bug was introduced when feature FFDC-10221 added Get FOMs from Acquisition trigger at beginning of Run and from "FOM from Secondary" trigger at end of Run was added. It should have also allowed FOMs at the end or Run from "Acquisition Stop Current Acquisition" trigger. | Acquisition | Bug | Medium | | 21.09.00-a | 21.09.00-m, 22.01.00-l, 22.03.00-h, 22.06.00-a |
| FFDC-10873 | Tool tab Summary table in FabGuard Web is showing duplicate rows if the tool has chambers with repeated Chamber IDs | | Web | Bug | Minor | 6028 | | 21.04.00-am, 21.09.00-m, 22.01.00-k, 22.03.00-g, 22.06.00-a |
| FFDC-10872 | Crash when load model saved by version 21.09.01 or higher | This bug only affected models that use Figures of Merit as inputs; it did not affect models that use time series data as inputs. This bug was introduced when adding feature "FFDC-10186 Create EPLs and MIs in Statistics Model". | Analysis | Bug | Major | 5987, 6001 | 21.09.01-a | 22.01.00-k, 22.03.00-g, 22.06.00-a |

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| FFDC-10867 | Alarm "Verification Golden Recipe Fault" for TRM does not contain name of tool recipe | | TRM | Bug | Minor | 6006 | 22.03.00-a | 22.03.00-g, 22.03.20-b, 22.06.00-a |
| FFDC-10866 | Acquisition Dictionary does not show Bin name for OPC UA connectons | | General | Bug | Minor | 6007 | | 21.04.00-am, 21.09.00-m, 22.01.00-k, 22.03.00-g, 22.03.20-b, 22.06.00-a |
| FFDC-10865 | "Multi Tool and Revision and Lock Manager" dialog does not properly resize "Select Tool and Chambers" dialog is the first dialog shown. | | General | Bug | Minor | | | 21.04.00-am, 21.09.00-m, 22.01.00-k, 22.03.20-b, 22.06.00-a |
| FFDC-10861 | Clone and Restore do not work | The preparatory part of Clone and Restore works correctly, but the FabGuard installer FabGuard_UpgradeSilent.exe exits without installing anything, with error "Installation exited because Silent installer can only upgrade IPM or AS" in the installer log file. | Installer | Bug | Medium | 5980 | 22.01.10-a | 22.03.00-f, 22.03.20-b, 22.06.00-a |
| FFDC-10860 | Missing plot upon requesting Process Metric Summary Reports from FabGuard Web | | Web | Bug | Minor | 5993 | 22.03.20-a | 22.03.00-f, 22.03.20-b, 22.06.00-a |
| FFDC-10857 | Metrology reports should warn if required filters do not have values | This only happened if the Preference for Required Filters for Indicator was set to something other than No. | Analysis | Bug | Minor | 5965 | | 22.01.00-k, 22.03.00-f, 22.03.20-b, 22.06.00-a |
| FFDC-10839 | Deploy of I/O Channels generates duplicates on the target | Only occurs if deploying to lower Chamber numbers due to improper sort. | General | Bug | Minor | 5836 | | 21.04.00-am, 21.09.00-m, 22.01.00-k, 22.03.00-g, 22.03.20-b, 22.06.00-a |
| FFDC-10837 | IQE importer should import new logistics | | General | Bug | Minor | 5969 | | 22.01.00-k, 22.03.00-f, 22.03.20-b, 22.06.00-a |
| FFDC-10836 | In Multi Run Viewer exclusion of a Run in the Scans tab turns off all selected Scans in the plot without updating the selections list | Only the selected Scans for excluded Run should be be unselected, the dialog should update to reflect the new configuration, and the plot for all other Scans should remain. | Program UI | Bug | Minor | 5971 | | 21.04.00-am, 21.09.00-m, 22.01.00-j, 22.03.00-f, 22.03.20-a, 22.03.20-b, 22.06.00-a |
| FFDC-10830 | Metrology reports incorrectly warn that the Metrology Name filters contain wildcards when they do not | This only happened if the Preference for Required Filters for Indicator was set to something other than No. | Analysis | Bug | Minor | 5965 | | 21.04.00-am, 21.09.00-l, 22.01.00-j, 22.03.00-f, 22.03.20-a, 22.03.20-b, 22.06.00-a |
| FFDC-10828 | The string value of some OPC UA numeric data types is not correct | This had few consequences, because the numeric value was correct even if the string value was not. | Connections | Bug | Minor | | 21.04.00-a | 21.04.00-am, 21.09.00-l, 22.01.00-j, 22.03.00-f, 22.03.20-a, 22.03.20-b, 22.06.00-a |
| FFDC-10827 | "OPC ECID List.dat" file does not work correctly for OPC UA | Note that if the "OPC ECID List.dat" file was created by a version that does not have this fix, the "OPC ECID List.dat" file must be created again with a version that does have this fix. | Connections | Bug | Minor | 5954 | 21.04.00-a | 21.04.00-am, 21.09.00-l, 22.01.00-j, 22.03.00-f, 22.03.20-a, 22.03.20-b, 22.06.00-a |
| FFDC-10825 | Chamber Descriptions not consistently shown on FabGuard Web maintenance table | | Web | Bug | Minor | 5948 | | 22.01.00-j, 22.03.00-f, 22.03.20-a |
| FFDC-10821 | When creating/editing a Signal Bin, Plot Block and Plot Preview can take a very long time to open | This was most noticeable if a large number of Runs were loaded for viewing Signal Bins and/or if these Runs had a large number of data points. | Analysis | Bug | Minor | 5925 | 21.04.05-a | 21.09.00-l, 22.01.00-j, 22.03.00-f, 22.03.20-a |
| FFDC-10818 | I/O Secondary parsing does not work if the "Starting at character #" is the same as "Ending at character #" | Symptom was if Starting and Ending character were the same it would not parse any of the string. | General | Bug | Minor | 5929 | | 21.04.00-am, 21.09.00-l, 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10814 | TOI for Lam SP203L should not try to enable events for ports that do not exist | | TOI | Bug | Minor | 5902 | 22.03.00-a | 22.03.00-e, 22.03.20-a |
| FFDC-10811 | Signal Bin stack clipboard does not correctly update when Bin order changes or Bins are deleted | | General | Bug | Medium | 5918 | | 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10799 | For some simultaneous sampling National Instruments IO boards, the number of channels that can scan at high rates is lower than the total number of channels | The affected boards are PCIe-6346XS, PXIe-6356S, PCIe-6374XS, and PCIe-6376XS. | Connections | Bug | Minor | 5904 | | 20.12.00-r, 21.04.00-al, 21.09.00-l, 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10797 | Data Density tables do not correctly show all the dates if Filter (more) is used to retrieve more data | | General | Bug | Minor | 5854 | | 21.04.00-al, 21.09.00-l, 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10793 | Application of Real Time SPC Reports may not correctly calculate Metrics and be described in Run Summary | Issue occurs if the Report cannot apply in real time (it is suppressed, rejected, logistics change mid Run from caching trigger, etc.), but can apply in at the end of the Run for the determination of metrics. In these case the list of applied Reports will not contain the Report, but Results per Bin will indicate that Report is applied. | Analysis | Bug | Minor | 5891 | | 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10788 | SECS Output Commands should be allowed for Tool Type "Lam Sabre 3D" | The SECS DLL "Novellus/Lam Concept 2 & 3" is required. The same commands as other Novellus/Lam tools are available, but the chamber-specific commands are not supported. | Connections | Bug | Minor | 5116 | 21.09.02-a | 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10787 | SECS DLL for Balzers BAK with KHAN should ignore extra elements in S6F1 sent by the tool | Note that SVIDs used by FabGuard must follow the formula SVID = Identifier + 256*Index, where Identifier and Index are specified in the tool's SECS manual. | Connections | Bug | Minor | 5034 | 21.09.01-a | 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10785 | Quick FDC creates Reports where Training data cannot be seen | Internally FabGuard incorrectly sets Sample Value for probability to 0 which retrieves nothing. The training filters are gray which means 0 or illegal value. | General | Bug | Minor | | | 21.04.00-ak, 21.09.00-k, 22.01.00-h, 22.03.00-d, 22.03.20-a |
| FFDC-10781 | In a Recipe or Run, copying a Tool Bin can result in Signal Bins that use the original Tool Bin to use the copy | This only happened if the user attempted to change to a tab other than the Tool Bin tab before fixing the copied Tool Bin to have unique IDs and only if the copied Tool Bin's name was alphabetically before the original Tool Bin's name. | General | Bug | Major | 5855 | | 21.04.00-ak, 21.09.00-k, 22.01.00-h, 22.03.00-d, 22.03.20-a |
| FFDC-10779 | FabGuard Web Chamber Utilization incorrectly normalizes each chamber | The values shown on the FabGuard Web are larger than actual values because normalization "stretches" the bars to be 100% total. | Web | Bug | Minor | 5844 | | 21.04.00-ak, 21.09.00-k |
| FFDC-10778 | Chamber Utilization display issues | The values shown on the FabGuard Web are larger than actual values because normalization "stretches" the bars to be 100% total. The values shown in Equipment State Summary Report for "State Utilization by Tool and Chamber" plot are not correctly normalized if more there is more than one retrieve from the database. Finally, the "Unknown" FabGuard State is renamed to "FabGuard Off". | General | Bug | Minor | 5844 | | 22.01.00-h, 22.03.00-d, 22.03.20-a |

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| FFDC-10777 | Entering Sensor Configuration Monitor screen for an RGA changes the scaling type of Analog Outputs | The result is that Log is changed to Linear. This only applies to RGAs that show Analog Outputs in Sensor Configuration Monitor. | Sensors | Bug | Minor | 5777 | | 21.04.00-ak, 21.09.00-k, 22.01.00-h, 22.03.00-c, 22.03.10-a |
| FFDC-10774 | Improve handling of OPC UA arrays | The first element of the array may not be correctly read. | Acquisition | Bug | Medium | | | 22.01.00-h, 22.03.00-c, 22.03.10-a |
| FFDC-10771 | FabGuard Web Navigation pane should show all the Executives on the Board and allow switching Executives in click | Only available if there is more than one FabGuard Executive on the Board. | Web | Bug | Minor | 5851 | | 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10766 | Postgres database script incorrect insert procedure for Anomaly table | | Database | Bug | Minor | | 22.03.00-a | 22.03.00-c, 22.03.10-a |
| FFDC-10765 | Control of Alerts Report does not filter based Alert Message when applying the Report | The UI during configuration works correctly, but run-by-run analysis does not. | Analysis | Bug | Medium | | | 21.04.00-ak, 21.09.00-k, 22.01.00-g, 22.03.00-c, 22.03.10-a |
| FFDC-10764 | SECS DLL for "Varian m2i and M2000/8" should accept numeric CEIDs in S6F3,F11,F13 messages | This is necessary to support newer versions of the tool software. Older tool software only had two CEIDs, which were sent as text ("remote-command-complete" and "hi:processing-site-status-change"); FabGuard assigns fake numeric CEIDs 1 and 2 to these two text CEIDs. | Connections | Bug | Minor | 5271 | | 22.01.00-g, 22.03.00-c, 22.03.10-a |
| FFDC-10762 | TOI for CUON Detaper should label load ports as Bottom and Top rather than 1 and 2 | | TOI | Bug | Minor | 5678 | 19.05.03-b | 21.09.00-j, 22.01.00-g, 22.03.00-c, 22.03.10-a |
| FFDC-10761 | Blank message instead of "Shift on Reset cannot be enabled for selected Chart Type!" is not show | | Program UI | Bug | Minor | 5825 | | 21.04.00-aj, 21.09.00-j, 22.01.00-g, 22.03.00-b, 22.03.10-a |
| FFDC-10760 | RVS DLL for Tianma Wuhan should send TRACEPARAMDATA message as XML rather than JSON | | Connections | Bug | Minor | 5162 | 22.01.00-a | 22.01.00-j, 22.03.00-f, 22.03.20-b, 22.06.00-a |
| FFDC-10759 | Improve anomaly detection based on avg and sdev | | Analysis | Bug | Minor | | | 22.03.00-c, 22.03.10-a |
| FFDC-10757 | Run Export types "Sapphire DCR 2.2.5" and "SKV1 TXT" do not work for network file save locations | | General | Bug | Minor | 5802 | 21.09.00-a | 21.09.00-j, 22.01.00-g, 22.03.00-b, 22.03.10-a |
| FFDC-10754 | In FabGuard Web Executive Summary and Detail table the "Analysis not applied 7days" and "Analysis not applied 24hrs" are incorrect | | Web | Bug | Minor | 5766 | | 21.04.00-aj, 22.01.00-f, 22.03.00-b |
| FFDC-10753 | Data Age for never connected Tool Bins should be controlled by a Global Preference | The choice is in Acquisition tab in Global Preference under "Data Latency and Age" - Start Tool Bin Data Age at 0 for new Tools Bins otherwise ignore until data exists = No or Yes. The choice is whether to ignore Data Age for never connected Tool Bins as in previous versions, or start Data Age at zero as implemented by FFDC-10372 and FFDC-10751. The default value of the preference is "No", which means the behavior is as it was in previous versions. | Acquisition | Bug | Medium | 5792 | 21.09.03-a | 22.01.00-f, 22.03.00-b, 22.03.10-a |
| FFDC-10752 | RVS DLL for CSOT2&3 should send LINENAME with same value as MACHINENAME in DAILYCHECKENDFORFDC message | | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-aj, 21.09.00-j, 22.01.00-g, 22.03.00-b, 22.03.10-a |
| FFDC-10751 | Data Age for never connected Tool Bins should start incrementing from 0 rather than 60 | | Acquisition | Bug | Minor | | 21.09.03-a | 22.01.00-e |
| FFDC-10750 | SPC of Metric Reports may not correctly insert report result record into the database | For Oracle and Postgres databases, getting this fix requires rerunning the database script. For SQL Server databases, getting this fix requires upgrading all FabGuard Nodes. | Database | Bug | Medium | | 22.01.00-a | 22.01.00-e, 22.03.00-b, 22.03.10-a |
| FFDC-10744 | TOI for Ulvac Enviro-1Xa 2C should support SlotMap | | TOI | Bug | Minor | 5565 | 22.01.00-a | 22.01.00-i, 22.03.00-e, 22.03.20-a |
| FFDC-10740 | Exit from RGA Leak Check screen should set emission and multiplier based on settings in sensor hardware configuration "Acquisition End" | Applies only if Leak Check is not being performed. Change makes Leak Check behave identically to what happens when leaving all other Maintenance screens. | General | Bug | Minor | 5543 | | 21.04.00-aj, 21.09.00-j, 22.01.00-e, 22.03.00-b, 22.03.10-a |
| FFDC-10738 | TOI for Lam Alliance fails with error in S2F41 PP-SELECT | | TOI | Bug | Minor | 5742 | 20.08.01-a | 21.04.00-ak, 21.09.00-k, 22.01.00-g, 22.03.00-c, 22.03.10-a |
| FFDC-10727 | TOI for CUON Detaper should use CEIDs 1112-1115 for Process Started/Complete | This reverts FFDC-10710, which was based on the tool's SECS manual, but the manual is incorrect. | TOI | Bug | Minor | 5678 | 21.09.00-i | 21.09.00-j, 22.01.00-g, 22.03.00-b, 22.03.10-a |
| FFDC-10722 | Web display from a emailed Report link shows extra borders and inactive links | | Web | Bug | Minor | | | 21.04.00-aj, 21.09.00-j, 22.01.00-e, 22.03.00-a |
| FFDC-10721 | Bins from I/O Secondaries (Latches and Snapshots) that resolve to a Placeholder prevent saving FabGuard Recipe | | Acquisition | Bug | Minor | 5721 | | 22.01.00-e, 22.03.00-a |
| FFDC-10720 | KPI calculations do not filter by Acquisition trigger for "Analysis Faults" and "Indicator Coverage" | | Web | Bug | Minor | | 22.01.00-a | 22.01.00-e, 22.03.00-a |
| FFDC-10717 | SmartFDC conflict between guardrails and clamping to zero prevents expansion of the envelope | | Analysis | Bug | Minor | | | 22.03.00-a |
| FFDC-10710 | TOI for CUON Detaper should use CEIDs 1114-1117 for Process Started/Complete | | TOI | Bug | Minor | 5678 | 19.05.03-a | 21.09.00-i, 22.01.00-e, 22.03.00-a |
| FFDC-10708 | CUON Detaper tool does not rotate correctly in FabGuard Web display | This also affects some other tool types, specifically if they have a large gray background or multiple user-disabled chambers. | Web | Bug | Minor | 5678 | 21.09.00-a | 21.09.00-i, 22.01.00-e, 22.03.00-a |
| FFDC-10706 | Facility display in FabGuard Web does not show real time data | | Web | Bug | Medium | | 21.04.00-ag | 21.04.00-al, 21.09.00-l, 22.01.00-e, 22.03.00-a |
| FFDC-10705 | Preference to apply background removal and unit conversion during export does not work for Scans unless the Preference to switch rows and columns is enabled | | General | Bug | Minor | | 20.08.03-a | 20.12.00-r, 21.04.00-ai, 21.09.00-i, 22.01.00-e, 22.03.00-a |
| FFDC-10704 | IO output channel "Chamber Acquisition Process On/Off Output" incorrectly sends the message for Off when the On event occurs | | I/O Channels | Bug | Minor | 5672 | 20.08.01-a | 20.12.00-r, 21.04.00-ai, 21.09.00-i, 22.01.00-e, 22.03.00-a |
| FFDC-10702 | Time series data export should protect against hidden carriage return, line feed, and tab characters | | General | Bug | Minor | | | 21.04.00-ai, 21.09.00-i, 22.01.00-e, 22.03.00-a |
| FFDC-10701 | Some reasons for analysis suppression or rejection not displayed correctly when viewing a Report | | Program UI | Bug | Minor | 5668 | 21.09.00-a | 21.09.00-i, 22.01.00-d, 22.03.00-a |
| FFDC-10696 | RVS DLL for BOE B12 should support incoming messages with RV Field Name "DATA" (in addition to "xmlData") | | Connections | Bug | Minor | 5039 | 21.09.02-a | 22.01.00-d, 22.03.00-a |
| FFDC-10678 | Connecting lines for the Report vs. Report plot are out of order | | Program UI | Bug | Minor | 3060 | | 22.01.00-d, 22.03.00-a |

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| FFDC-10671 | RVS DLL for CSOT2&3 should support user-specified MACHINE_NAME and UNIT_NAME in Chamber ID | The character "" is used as the separator, so Chamber ID should be entered as "MachineName^UnitName". | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-ai, 21.09.00-i, 22.01.00-d, 22.03.00-a |
| FFDC-10664 | Audit comment when changing Connection Advanced Parameters should be added to Connection Audit history | Added Connections Edit Audit Type and Audit Information with "Advanced" | General | Bug | Minor | 5614 | | 21.04.00-ah, 21.09.00-h, 22.01.00-d, 22.03.00-a |
| FFDC-10660 | TCP IO Trigger Secondaries that are not ModbusTCP cause FabGuard Node to crash | Also, the user interface should only allow ModbusTCP Trigger Secondaries for TCP connections. | I/O Channels | Bug | Medium | 5591 | | 21.04.00-ah, 21.09.00-h, 22.01.00-d, 22.03.00-a |
| FFDC-10653 | Alarm for 'Required Figure of Merit not analyzed' generated incorrectly unless the Figure of Merit has both Real Time and Run-by-Run analyses | | Analysis | Bug | Medium | 5593 | | 21.04.00-ah, 21.09.00-h, 22.01.00-d, 22.01.10-a, 22.03.00-a |
| FFDC-10644 | SECS DLL for Innomax TRAUM120CS has incorrect format (needs U4) for several parameters | | Connections | Bug | Minor | 5573 | 20.12.03-a | 21.04.00-ah, 21.09.00-h, 22.01.00-d, 22.01.10-a |
| FFDC-10643 | Columns in the dialog for adding Bins from Dictionary are shifted and do not show all the information | | Program UI | Bug | Minor | 5570 | 20.08.00-a | 20.08.00-aa, 20.12.00-r, 21.04.00-ah, 21.09.00-h, 22.01.00-d, 22.01.10-a |
| FFDC-10523 | TOI for Ulvac Enviro-1Xa 2C gets stuck "Waiting for 'Process-Job Pool' event" | | TOI | Bug | Minor | 5565 | 22.01.00-a | 22.01.00-d, 22.03.00-a |
| FFDC-10511 | Recipeld placeholder should work for IO output channel "Tool Recipe Management Verification Failed Output" | | I/O Channels | Bug | Minor | 5548 | | 21.04.00-ag, 21.09.00-g, 22.01.00-c, 22.01.10-a |
| FFDC-10494 | FG Web layout shifted 10 pixels after an upgrade | | Web | Bug | Minor | 5503 | | 21.04.00-ag, 21.09.00-g, 22.01.00-c, 22.01.10-a |
| FFDC-10493 | FG Web Ticket link has old address | | Web | Bug | Minor | 5504 | | 20.12.00-r, 21.04.00-ag |
| FFDC-10485 | SmartFDC installer should set .json mime type in IIS | | Installer | Bug | Minor | | | 21.04.00-ag, 21.09.00-g, 22.01.00-b, 22.01.10-a |
| FFDC-10484 | FabGuard can crash when executing Anomaly model in run-by-run analysis | | Analysis | Bug | Minor | | 22.01.00-a | 22.01.00-b |
| FFDC-10481 | HTTP output generates an Alarm incorrectly | Alarm is generated even if the Channel does not have configured response, or if the response is not XML. | I/O Channels | Bug | Minor | 5471 | 21.04.03-a | 21.09.00-g, 22.01.00-b, 22.01.10-a |
| FFDC-10479 | Incorrect parsing of arrays in JSON Data on HTTP requests | Applies to I/O Channels requesting Secondaries using JSON format | I/O Channels | Bug | Minor | 5470 | | 21.04.00-ag, 21.09.00-g, 22.01.00-a |
| FFDC-10476 | Timed Bakeout dialog does not show correct Power options for Transpector 2 and 2.5 CPM | | Sensors | Bug | Minor | | 20.12.00-a | 20.12.00-r, 21.04.00-ag, 21.09.00-g, 22.01.00-a |
| FFDC-10466 | Effectiveness Criteria History plot incorrectly multiplies counts by Report Effectiveness Deductions | | Web | Bug | Minor | | | 21.04.00-af, 21.09.00-g, 22.01.00-a |
| FFDC-10457 | Viewing a Lot SPC report that applies to multiple Figures of Merit shows incorrect values when report was enabled | | Analysis | Bug | Medium | 5427 | | 22.01.00-a |
| FFDC-10455 | Model Bins created using a template are incorrectly labeled as Signal Bins | Signal Bins are not really allowed in Models, so some features cannot work. | General | Bug | Minor | 5426 | | 21.04.00-af, 21.09.00-g, 22.01.00-a |
| FFDC-10453 | Protect against illegal time in Sensor Factory Configuration and other dialogs | | Program UI | Bug | Minor | 5423 | | 21.04.00-ae, 21.09.00-d |
| FFDC-10432 | Should allow one Real Time SPC Report to be applied to multiple Bins during acquisition | | Analysis | Bug | Minor | 5401 | | 21.04.00-ae, 21.09.00-g, 22.01.00-a |
| FFDC-10429 | Real Time SPC Report stops looking for Critical Fault if Moderate Fault found in same Step/Frame | | Analysis | Bug | Minor | 5401 | 20.04.03-a | 20.08.00-aa, 20.12.00-r, 21.04.00-ae, 21.09.00-g, 22.01.00-a |
| FFDC-10428 | FabGuard Web Health is incorrectly colored red for a value of 25% | | Web | Bug | Minor | | | 21.09.00-g, 22.01.00-a |
| FFDC-10425 | Tool Recipe Directory dialog in TRM does not work | | Program UI | Bug | Minor | | 21.04.01-a | 21.09.00-f, 22.01.00-a |
| FFDC-10423 | FabGuard Web does not work | This bug only affects 21.09.00-e. | Web | Bug | Medium | | 21.09.00-e | 21.09.00-f |
| FFDC-10421 | RVS DLL for Seeya should become Verified immediately after receiving SubjectReply message without checking RETURNCODE | | Connections | Bug | Minor | 4346 | | 21.04.00-ae, 21.09.00-f, 22.01.00-a |
| FFDC-10419 | Loading the "SECS CEID List.dat" file does not work | | I/O Channels | Bug | Minor | | | 21.04.00-ae, 21.09.00-f, 22.01.00-a |
| FFDC-10418 | Gain settings 5 and 10 do not work for NI boards PCI-6154S, PCIe-6346XS, and PXIe-6356S | | Connections | Bug | Minor | | | 21.04.00-ae, 21.09.00-f, 22.01.00-a |
| FFDC-10410 | Process Faults and Process Counts are switched in the KPI history table and plot in FabGuard Web | | Web | Bug | Minor | | 21.09.00-a | 21.09.00-e, 22.01.00-a |
| FFDC-10408 | The History Split/Train list in Active Analysis is not fully shown if a row is taller than the full grid | Click on the cell to see all. | Program UI | Bug | Minor | | | 21.09.00-e, 22.01.00-a |
| FFDC-10407 | TRM forgets its list of Tool Recipes after editing Connections | This only happens for Connection edits that display the warning "Changes require Reset of all Connections!". | TRM | Bug | Medium | 5303 | | 21.04.00-ae, 21.09.00-e, 22.01.00-a |
| FFDC-10404 | Switching between FabGuard Node type does not correctly fix possible Chambers | If one installs an IPM and then installs an FM, the list of possible Chambers is not fixed. Thus, if you started with 5 chamber tool in an IPM and then install an FM, the FM will not allow more than 5 chambers, even though 40 should be allowed. | General | Bug | Minor | 5345 | | 21.04.00-ad, 21.09.00-e, 21.09.03-a |
| FFDC-10403 | TOI for Evatec Radiance should wait to send S2F41 START if another port is already started | | TOI | Bug | Minor | 4492 | | 21.09.00-e, 22.01.00-a |
| FFDC-10395 | Substrate Information logistics (Lot ID, etc.) are not used for filtering the display of Maintenance Indicator (MI) Reports | Affects Lot ID, Cassette ID, Slot ID, Substrate ID, Part ID, Layer ID, Technology ID and Extra1 ID through Extra8 ID. Filtering works properly when Report is applied by FabGuard Node. | General | Bug | Medium | 5298 | | 20.04.00-s, 20.08.00-aa, 20.12.00-r, 21.04.00-ad, 21.09.00-e, 21.09.03-a |
| FFDC-10394 | Web drill down fails in Process Utilization KPI history table for tool | | Web | Bug | Medium | | 21.09.02-a | 21.09.03-a |
| FFDC-10392 | Drill down from EPI/MI/SI history shows only current day | | Web | Bug | Major | | 21.09.02-a | 21.09.03-a |
| FFDC-10391 | Signal Bin based Designated Tool Bins do not work in Bin Statistics | | Analysis | Bug | Medium | 5270 | | 20.08.00-aa, 20.12.00-r, 21.04.00-ad, 21.09.00-e, 21.09.03-a |
| FFDC-10390 | RVS DLL for CSOT2&3 should match MACHINENAME in incoming DAILYCHECKENDFORFDC message to Chamber Description | | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-ad, 21.09.00-e, 21.09.03-a |
| FFDC-10389 | Web fails to hide checkboxes and panes for Facilities user | | Web | Bug | Minor | | 21.09.00-a | 21.09.00-e, 22.01.00-a |
| FFDC-10382 | Process faults, Process coverage, Process count, and Process utilization time series has EPI/MI/SI listed in the plot legend and should not | | Program UI | Bug | Minor | | 21.09.02-a | 21.09.03-a |

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| FFDC-10381 | TDS Sensor unassignable on Chamber 45 in TEL ACT8 (v2) tool type | | General | Bug | Minor | 5293 | | 21.04.00-ac, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10369 | SPC Chart Type choices in a grid do not show all possible choices for Lot-by-Lot analysis | Lot-by-Lot analysis has the same Chart Type choices as Run-by-Run analysis. Keep in mind that Run-by-Run analysis used the distribution of individual measurements in a Run, while Lot-by-Lot analysis used the distribution averages in a Lot. | Program UI | Bug | Minor | 5273 | | 21.04.00-ac, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10365 | Multi Run Viewer does not correctly show plot after getting more Runs | Applies only if "Results shown" is set to Step aligned or specific Step. | Program UI | Bug | Minor | | | 21.04.00-ae, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10364 | Multi Run Viewer does not preserve Include/Exclude selection after getting more Runs | The Include/Exclude list is reset, but previously excluded Runs are still excluded. | Program UI | Bug | Minor | | | 21.04.00-ae, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10362 | Anharmonic Activity from IC6 and Cygnus2 shows incorrect value | | Gauges | Bug | Minor | | 20.08.01-a | 20.12.00-r, 21.04.00-ac, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10361 | Fast Data from NI Boards can be duplicated | If the Fast Data frequency is low (<= 100Hz) and standard data rate is fast (~ 20 ms delay time), fast data from previous data may be duplicated in one data point. This happens when FabGuard requests new data from the board and there is no new data. | Acquisition | Bug | Medium | 5203 | | 20.04.00-s, 20.08.00-aa, 20.12.00-r, 21.04.00-ac, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10358 | TOI for Axcelis Fusion 200 ACU, Fusion 200 MCU, Fusion 200 PCU should try to use additional CEIDs for Process Complete | Use CEIDs 8456/8458 (Left/Right Port Unloaded) in addition to CEIDs 274/275 (Left/Right Port Processing Complete). FabGuard TOI will treat S6F11 for either CEID to mean Process Complete. Also, in Operator Interface in FabGuard Web, label the ports as Left and Right rather than 1 and 2. | TOI | Bug | Minor | 5031 | 20.08.01-a | 21.04.00-ac, 21.09.00-d, 21.09.02-a |
| FFDC-10354 | RVS DLL for CSOT2&3 should ignore parameters with empty PARAM_VALUE in incoming DAILYCHECKENDFORFDC message | Also, incoming DAILYCHECKENDFORFDC messages on the Auxiliary channel should be completely ignored. These messages should only be processed if received on the Main channel. | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-ac, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10351 | Fab Layout not visible when web starts | | Web | Bug | Minor | | 21.04.00-ab | 21.04.00-ac |
| FFDC-10347 | FabGuard Node can crash if TOI enabled but never used | The crash occurs for some Tool Types on receipt of an S6F11 for a CEID that is used by TOI, but the S6F11 does not contain the RPTID(s) needed by TOI because TOI has never been used since SECS communication was started. | TOI | Bug | Medium | 5206 | | 21.04.00-ac, 21.09.00-d, 21.09.02-a |
| FFDC-10334 | SmartFDC UI 2.1.2 | | Web | Bug | Minor | | | 21.09.00-d, 21.09.01-b, 21.09.02-a |
| FFDC-10332 | Anomaly model does not correctly exclude points with Data Age above Threshold | | Analysis | Bug | Minor | | | 21.04.00-ab, 21.09.00-d |
| FFDC-10327 | In Multi Run Viewer excluding on the plot does not apply unless one toggles Manage Runs tab | | Program UI | Bug | Minor | 5213 | | 21.04.00-ab, 21.09.00-d, 21.09.01-b, 21.09.02-a |
| FFDC-10323 | ECID Verification can request an increasing number of ECIDs if the tool does not send a valid reply | | Connections | Bug | Minor | 5143 | | 20.08.00-aa, 20.12.00-r, 21.04.00-ab, 21.09.00-d, 21.09.01-b, 21.09.02-a |
| FFDC-10321 | SmartFDC UI 2.1.1 | | Web | Bug | Minor | | | 21.09.00-c |
| FFDC-10316 | Fix protection for very small/large numbers when calculating SmartFDC Anomaly Metrics | | Analysis | Bug | Minor | | | 21.09.00-d, 21.09.01-b, 21.09.02-a |
| FFDC-10315 | FabGuard Client does not include some Executives in droplist | This can happen if the Executive computer name contains any lower case letters. | Executive | Bug | Minor | 4932 | | 20.08.00-aa, 20.12.00-r, 21.04.00-ab, 21.09.00-c, 21.09.01-b, 21.09.02-a |
| FFDC-10312 | SECS DLL for TEL Clean Track Mark8 Phase6 should custom decode SVID 88 | The decoding of SVID 88 is almost exactly the same as the decoding of SFCD 107 in the SECS DLL for TEL Clean Track Mark8 (which is for older versions of this tool). The only difference is that the Index needed for SFCD 107 is one larger than the Index needed for SVID 88, because the S1F6 message for SFCD contains one extra element (the value of the SFCD, which is the first non-list element in S1F6). | Connections | Bug | Minor | 5038 | 20.12.03-a | 21.09.00-c, 21.09.01-b, 21.09.02-a |
| FFDC-10305 | On FabGuard Web, Fab and Group detail tables may show 7 day columns even though they are disabled | | Web | Bug | Minor | | 21.09.00-a | 21.09.00-c, 21.09.01-a, 21.09.02-a |
| FFDC-10303 | Validate that an insert into epi_state and analysis_state tables has the latest time | | Database | Bug | Minor | 5180 | | 21.09.02-a |
| FFDC-10298 | Data Age Bins should correctly label which connection they belong to in Run information tree | Also, the Bin connection name should be consistent with all other displays of connection information: "I/O Board" connection is incorrectly labeled as "Digital" in Run Info display. | Program UI | Bug | Minor | | | 20.08.00-aa, 20.12.00-r, 21.04.00-ab, 21.09.00-c, 21.09.01-a |
| FFDC-10297 | EPI analysis may leak memory | | General | Bug | Minor | | | 20.08.00-aa, 20.12.00-r, 21.04.00-ab, 21.09.00-c, 21.09.01-a |
| FFDC-10296 | TOI for Semsystco Stellar always sends Port ID as 0 in S2F41 | | TOI | Bug | Minor | 5168 | 20.04.03-a | 21.04.00-ac, 21.09.00-d, 21.09.02-b, 21.09.03-a |
| FFDC-10289 | Do not allow the sub-scan UI for PrismaPlus and QMG7xx RGAs | The sensor does not support the functionality. | Sensors | Bug | Minor | 5133 | | 21.04.00-aa, 21.09.00-b, 21.09.01-a |
| FFDC-10288 | Adding Bin Statistics Extra FOM in a Statistic Model does not show dropdown options | | Program UI | Bug | Minor | | | 21.04.00-aa, 21.09.00-b, 21.09.01-a |
| FFDC-10286 | SmartFDC UI 2.0.1 | | Web | Bug | Minor | | 21.09.00-a | 21.09.00-b, 21.09.01-a |
| FFDC-10283 | RVS DLL for CSOT2&3 missing APC_MSC_CH_PRESS and APC_MSD_CH_PRESS from SVID list | | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-ad, 21.09.00-e, 21.09.03-a |
| FFDC-10281 | Chamber Analysis Thread heartbeat failure alarms not inserted into database | | Analysis | Bug | Minor | | 20.12.02-a | 21.04.00-aa, 21.09.00-b, 21.09.01-a |
| FFDC-10267 | Non Facility Tool Bins and Signal Bins are shown as facility data on FabGuard Web | Applies only to FabGuard IFM. | Web | Bug | Minor | 5126 | | 21.04.00-aa, 21.09.00-b, 21.09.01-a |
| FFDC-10263 | Tool icons and captions have different spacing in layout editor and web | | Web | Bug | Minor | 5115 | 21.04.00-a | 21.04.00-aa, 21.09.00-b, 21.09.01-a |
| FFDC-10261 | TOI for Axcelis Fusion 200 ACU, Fusion 200 MCU, Fusion 200 PCU should use S2F15, S2F27, and S2F21 | | TOI | Bug | Minor | 5031 | 20.08.01-a | 21.04.00-aa, 21.09.00-b, 21.09.01-a |

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| FFDC-10259 | TOI for Evatec Radiance needs Load option and should not wait for 'PP SELECTED' event | | TOI | Bug | Minor | 4492 | 21.04.01-a | 21.09.00-b, 21.09.01-a |
| FFDC-10256 | Web displays "Insufficient access to view Group" if no Tool is selected | | Web | Bug | Minor | | 21.04.05-b | 21.09.00-b, 21.09.01-a |
| FFDC-10255 | Two Tazmo tool types show sensor connection lines for a missing chamber | | General | Bug | Minor | | 21.04.05-b | 21.09.00-b, 21.09.01-a |
| FFDC-10249 | Maintenance KPI label is not correct | | Web | Bug | Minor | | | 21.09.00-b, 21.09.01-a |
| FFDC-10248 | Deploy does not generate I/O Channel or Recipe Add/Edit/Delete Audit entries | | General | Bug | Minor | 4952 | | 21.09.00-b, 21.09.01-a |
| FFDC-10246 | Lot Verification does not work if a lot has no processes and Lot Substrate Count (Quantity) is only in Lot End trigger | | I/O Channels | Bug | Minor | 5075 | | 20.08.00-aa, 20.12.00-q, 21.04.00-z, 21.09.00-a |
| FFDC-10244 | FabGuard Sensor Controller cannot assign sensors | | Program UI | Bug | Minor | 5084 | 21.04.00-a | 21.04.00-z, 21.09.00-a |
| FFDC-10242 | Some parameters not read from CPM3 RGA | The affected parameters are: Bypass Delay, Pumpdown Delay, Peripheral Controller Power on Time, Peripheral Foreline Pump on Time, Peripheral Turbo Pump on Time. | Sensors | Bug | Medium | 5076 | 20.12.00-a | 20.12.00-q, 21.04.00-z, 21.09.00-a |
| FFDC-10238 | TOI for Evatec Radiance gets stuck Waiting for 'PP SELECTED' event | | TOI | Bug | Minor | 4492 | 21.04.01-a | 21.09.00-a |
| FFDC-10235 | TOI for ASML PAS5500 gets stuck Waiting for 'PROCESS STARTED' event | | TOI | Bug | Minor | 4998 | 20.04.03-a | 20.12.00-q, 21.04.00-z, 21.09.00-a |
| FFDC-10233 | Clicking a group (or Executive) in web navigation switches to the Group (or Fab) tab | | Web | Bug | Minor | | | 22.01.00-a |
| FFDC-10228 | Run Export in PAN and PAN2 format should use "-" rather than "" for text values that are empty | | Acquisition | Bug | Minor | 5035 | | 21.04.00-y, 21.09.00-a |
| FFDC-10220 | Fab level KPI for Process Utilization is missing in light theme | | Web | Bug | Minor | | 21.04.05-a | 21.09.00-a |
| FFDC-10219 | "Billboard: Tools for User" display in FabGuard Web displays a browser error | | Web | Bug | Minor | | 21.04.00-a | 21.04.00-y, 21.09.00-a |
| FFDC-10218 | "Tool Operator Interface" display in FabGuard Web shows blank Tool tab | | Web | Bug | Minor | | 21.04.05-a | 21.09.00-a |
| FFDC-10217 | Getting FOMs from I/O Channel Secondary could be delayed resulting in a wrong value | | Acquisition | Bug | Minor | | 21.04.00-a | 21.04.00-y, 21.09.00-a |
| FFDC-10211 | Icons missing from report viewed via emailed link | | Web | Bug | Minor | | | 21.04.00-y, 21.09.00-a |
| FFDC-10209 | No data from Edwards HTTP connection | | Gauges | Bug | Medium | 4958 | 21.04.00-a | 21.04.00-y, 21.09.00-a |
| FFDC-10208 | FabGuard should publish TOI state only if there is a state transition (even when TOI command could not be initiated) | Previously, when a TOI command could not be initiated, FabGuard always published TOI state. In contrast, when a TOI command had been initiated successfully, FabGuard only published TOI state on transition. This change makes both cases consistent, with TOI state published only on transition. | TOI | Bug | Minor | | 20.08.04-a | 21.04.00-y, 21.09.00-a |
| FFDC-10207 | TOI for Axcelis Fusion 200 MCU and Fusion 200 PCU should use S7F1 and S2F21 | | TOI | Bug | Minor | | 20.08.01-a | 21.04.00-y, 21.09.00-a |
| FFDC-10206 | Plus signs in report pathnames break email links | | Web | Bug | Minor | | | 21.04.00-y, 21.09.00-a |
| FFDC-10202 | IQE file importer could create Runs that caused Model Bins to be invalid | This could cause a crash when creating Model Bins. | Acquisition | Bug | Medium | | 20.12.00-a | 20.12.00-p, 21.04.00-x, 21.09.00-a |
| FFDC-10201 | Bins created from I/O Channels inherit Alias state | All Bins automatically created from I/O Channels should not inherit Alias state of the IO Channel, they should inherit the Bin Internal Reference setting. | Acquisition | Bug | Medium | 5029 | | 20.04.00-s, 20.08.00-z, 20.12.00-p |
| FFDC-10198 | Crash when importing old Runs into database | This occurred when importing Runs that were acquired before the database was created or before it was upgraded from <19.09.00 to >=19.09.00. It also occurred when Batch Bin Processing old Runs. | Database | Bug | Medium | | 21.04.00-u | 21.04.00-x, 21.09.00-a |
| FFDC-10195 | TOI for Evatec Radiance should have 2 load ports rather than 4 | | TOI | Bug | Minor | 4492 | 21.04.01-a | 21.09.00-a |
| FFDC-10194 | Active Alerts should not use filters from Active Alarms | | Program UI | Bug | Minor | 4977 | | 21.04.00-x, 21.09.00-a |
| FFDC-10193 | IO Channel Data Output may not work if Tool Bins are sent and not configured with SVID offset | | I/O Channels | Bug | Minor | | | 21.04.00-w, 21.09.00-a |
| FFDC-10192 | Signal Bin Time range functions do not correctly remember "Duration" setting | | General | Bug | Minor | 5023 | | 20.08.00-z, 20.12.00-p, 21.04.00-w, 21.09.00-a |
| FFDC-10191 | Report tasks should not allow PDF dispositions to have "Use Report folder" set to Yes | | Executive | Bug | Minor | 4730 | | 21.04.00-w, 21.09.00-a |
| FFDC-10190 | Web Generated Result Summaries Refresh every 20 seconds | | Web | Bug | Minor | | 21.04.05-b | 21.09.00-a |
| FFDC-10188 | Health is not a % in Detail Tables of Fab/Group/Tool Table. | | Program UI | Bug | Minor | | 21.04.05-a | 21.09.00-a |
| FFDC-10187 | Health KPI number keeps flipping from best to worst every refresh | | Program UI | Bug | Minor | | 21.04.05-a | 21.09.00-a |
| FFDC-10182 | FabGuard Client does not perform comparison for auto comment generation in "Tool: I/O Channel Manager" | | General | Bug | Minor | 4933 | | 21.04.00-v, 21.04.05-b, 21.09.00-a |
| FFDC-10181 | Rejection trigger information is only stored in the Run at the beginning of acquisition | Should be stored at the end since the triggers can occur during acquisition. | Acquisition | Bug | Minor | | | 21.04.00-v, 21.04.05-b, 21.09.00-a |
| FFDC-10178 | Web plot selections disappear on refresh | | Web | Bug | Minor | | 21.04.05-a | 21.09.00-a |
| FFDC-10177 | TOI for ASML PAS5500 uses incorrect CEIDs for Process Start and Process Complete | | TOI | Bug | Minor | | 20.04.03-a | 20.12.00-p, 21.04.00-x, 21.09.00-a |
| FFDC-10176 | SmartFDC UI 1.3.3 | Dates displayed as invalid for time zones with a positive offset of UTC. | Web | Bug | Minor | | | 21.04.00-v |
| FFDC-10173 | Run display on the web from a Alarm or web Report does not use Archive path to find the location of the Run | | Web | Bug | Minor | | | 21.04.00-v, 21.04.05-b, 21.09.00-a |
| FFDC-10170 | Reset Anomaly model calculations on change of Bin Character | | Analysis | Bug | Minor | | | 21.04.00-v, 21.04.05-b, 21.09.00-a |
| FFDC-10169 | Amplifier Offset Calibration does not work for PrismaPlus and QMG7xx RGAs | | Sensors | Bug | Minor | 3277 | | 21.04.00-v, 21.04.05-b, 21.09.00-a |
| FFDC-10164 | Real Time SPC analysis Reports do not correctly mark faults in Report Result table if persistence is not satisfied | Viewing Reports incorrectly shows a fault in plot "X with Faults" and Process metrics incorrectly increment. | Analysis | Bug | Minor | 4965 | | 21.04.00-v, 21.04.05-b, 21.09.00-a |
| FFDC-10163 | Report History Reset and Suppress uses incorrect User Name in Audit entries | | Security | Bug | Minor | | | 21.04.05-b, 21.09.00-a |

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| FFDC-10162 | Default Engineer password does not work | | Security | Bug | Minor | | | 20.08.00-z, 20.12.00-p, 21.04.00-v, 21.04.05-b |
| FFDC-10159 | Postgres should not convert values to 0.0 if they have an exponent more negative than -14 | | Database | Bug | Minor | | | 21.04.05-a |
| FFDC-10157 | Protect Anomaly model from producing very large scores | | Analysis | Bug | Minor | 4777 | | 21.04.00-u, 21.04.05-a |
| FFDC-10156 | Protect database from very small and very large numbers | SQL Server and Postgres use 1E250. Oracle uses 1E121. | Database | Bug | Minor | 4777 | | 21.04.00-u, 21.04.05-a |
| FFDC-10152 | RVS DLL for CSOT2&3 minor fixes to outgoing messages | Remove Reply Subject. Change SYSTEM_BYTE to SYSTEMBYTE. Start message with "<?xml version='1.0' encoding='UTF-8'?>". TRANSACTIONID should be 19 digits rather than 17. | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-u, 21.04.05-a |
| FFDC-10151 | "Number of occurrences before trigger" does not work for TCP trigger primary | | I/O Channels | Bug | Minor | 4911 | | 21.04.00-u, 21.04.05-a |
| FFDC-10148 | FabGuard could get stuck loading database cache file if both the .dbc and .dbcb files are bad | | General | Bug | Minor | 4948 | | 20.08.00-aa, 20.12.00-r, 21.04.00-u, 21.04.05-a |
| FFDC-10147 | EPI logistics marked not to be used for comparisons are not present in the database | | General | Bug | Minor | 4939 | | 21.04.00-u, 21.04.05-a |
| FFDC-10145 | TPS commands for Adixen ADP/ADS vacuum pump do not work | | Gauges | Bug | Minor | 4901 | 20.08.02-a | 21.04.00-u, 21.04.05-a |
| FFDC-10143 | For bar plots where the first color is Gray or Yellow, the overlaid text should be black, not white | | Program UI | Bug | Minor | 4810 | | 21.04.00-aj, 21.09.00-j, 22.01.00-g, 22.03.00-b, 22.03.10-a |
| FFDC-10142 | FabGuard Client timeout for TRM should be 20 minutes (rather than 5) when uploading or downloading a tool recipe | | General | Bug | Minor | 4620 | | 21.04.00-u, 21.04.05-a |
| FFDC-10135 | TOI for PSK DAS2000 sends incorrect RCMD for S2F41-MAP | | TOI | Bug | Minor | 4941 | 20.04.03-a | 20.08.00-y, 20.12.00-p, 21.04.00-u, 21.04.05-a |
| FFDC-10131 | Executive incorrectly loads Size Condition for File Delete tasks | If a File Delete task's Size Condition was "no size condition", Executive would change it to "less than or equal to" the next time Executive starts. | Executive | Bug | Medium | 4922 | 20.08.01-a | 20.12.00-p, 21.04.00-u, 21.04.05-a |
| FFDC-10128 | Multi Run Viewer does not plot first Run | If only one Run was loaded, it would not plot anything. | General | Bug | Medium | | 21.04.00-s | 21.04.00-t, 21.04.05-a |
| FFDC-10126 | Multi Run Viewer did not properly plot if a specific step is selected and not all Runs have this step | | Program UI | Bug | Medium | | | 21.04.00-s, 21.04.05-a |
| FFDC-10124 | Target Shift and History Reset are missing for Reports in a Family in Report and Model Manager | | Program UI | Bug | Minor | | | 21.04.00-s, 21.04.05-a |
| FFDC-10123 | Active Analysis and Alarms should use "Partial Edit" security setting for Shift and Reset actions | Applied to only Active Analysis and Alarms dialogs. Report and Model Manager correctly checked permissions. | Security | Bug | Medium | | | 21.04.00-s, 21.04.05-a |
| FFDC-10122 | I/O Bins (Latch, Snapshot, Trigger) can have values in incorrect order, i.e., swapped with other I/O Bins in the same Run | | Acquisition | Bug | Critical | | 21.04.00-q | 21.04.00-r, 21.04.04-a |
| FFDC-10118 | RVS DLL for CSOT2&3 validates and sends incorrect LINENAME, MACHINENAME and UNITNAME | LINENAME is FabGuard Tool Description. MACHINENAME is FabGuard Chamber Description. UNITNAME is FabGuard Chamber ID. Also change TIMESTAMP and CHECK_TIME to have 4 digit year. | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-s, 21.04.05-a |
| FFDC-10117 | TOI for Oxford PlasmaPro 100 RIE should allow Port State = IDLE WITH ALARMS | | TOI | Bug | Minor | | 20.08.04-a | 21.04.00-r, 21.04.04-a |
| FFDC-10116 | Grid Edit in Acquisition Dictionary could give incorrect duplicate error for Connection = Value entries | | Program UI | Bug | Minor | 4893 | | 21.04.00-r, 21.04.04-a |
| FFDC-10113 | File importer does not change its status to bad if it cannot access "Path to save Run" | | Acquisition | Bug | Minor | | | 21.04.00-r, 21.04.04-a |
| FFDC-10108 | Editing Tool Groups causes the FabGuard Client to hang | | General | Bug | Medium | | 21.04.03-a | 21.04.04-a |
| FFDC-10106 | Deleted Analysis Reports should be removed from a Report Task when editing the Task's list of Reports | Note that Reports that have been completely removed from the database are already removed from a Report Task when editing the Task's list of Reports. This change implements the same behavior for Reports in the Deleted Analysis Reports folder. | General | Bug | Minor | 4658 | 19.09.00-a | 21.04.00-q, 21.04.04-a |
| FFDC-10104 | Comparing Recipes indicates difference when there is none | Change in sort order of I/O Bins can lead to incorrect comparison or incorrect auto generated comment. | General | Bug | Minor | 4850 | 20.12.02-a | 21.04.00-q, 21.04.03-a |
| FFDC-10099 | TOI for SSEC M3303 and SSEC 3305 should fail if Extra1 is empty | This removes the change made in FFDC-9846, which used "Production.hnd" for HandlerRecipe if Extra1 was empty | TOI | Bug | Minor | 3910 | 20.12.00-i | 20.12.00-o, 21.04.00-q, 21.04.04-a |
| FFDC-10098 | Recipe Plan Overview does not show Models or SPC Reports | | Program UI | Bug | Minor | | 21.04.00-a | 21.04.00-q, 21.04.03-a |
| FFDC-10097 | Placeholder Tool Bins cannot be saved to a Recipe | This bug was introduced in versions 20.04.00-q, 20.08.00-s, and 20.12.00-j by FFDC-9858, which fixed a related bug. This bug does not affect other version numbers. | Acquisition | Bug | Minor | 4855 | 20.04.00-q | 20.04.00-s, 20.08.00-x, 20.12.00-o |
| FFDC-10096 | Postgres script has wrong data type for 2 columns in lot_ui_status | If a Postgres database was created or upgraded with an earlier letter version of the FabGuard 21.04.00 script, fixing this requires re-running the database script. This only affects SmartFDC UI. | Database | Bug | Minor | 4863 | 20.12.04-a | 21.04.00-q, 21.04.03-a |
| FFDC-10094 | Web Alarm and Alert lists do not purge older than 24 hours | Previously, all purges happen only when new alarm or alert occurs, and if there are more than 25 Alarms or Alerts, older than 24 hours check was ignored. | Web | Bug | Minor | 4852 | | 21.04.00-q, 21.04.03-a |
| FFDC-10092 | SmartFDC UI 1.2.1 | Improved the performance of database query when drilling down to Runs. | Web | Bug | Minor | | | 21.04.00-p, 21.04.03-a |
| FFDC-10091 | Report History reset may not happen until second occurrence | If the logistic by which the Report History is reset is also used for Report history split, the reset will not happen the first time the logistic value happens. | Analysis | Bug | Minor | 4793 | | 21.04.00-p, 21.04.03-a |
| FFDC-10089 | Alarm Summary Report should allow color by Indicator, Step number and Analysis Name | | General | Bug | Minor | 4489 | | 21.04.00-p, 21.04.03-a |
| FFDC-10087 | Chamber 50 Chamber Type selection is allowed and not saved | | Program UI | Bug | Minor | | | 21.04.00-p, 21.04.03-a |
| FFDC-10086 | I/O reset after analysis may reset before all analysis are done | Effects mostly Digital and Sensor I/O. | I/O Channels | Bug | Minor | | 21.04.00-a | 21.04.00-p, 21.04.03-a |

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| FFDC-10085 | Incorrect value is shown for "SECS Get Tool's Events" in FabGuard Acquisition when any chambers are active | | Program UI | Bug | Minor | 4796 | | 20.08.00-x, 20.12.00-o, 21.04.00-p, 21.04.03-a |
| FFDC-10084 | Signal Bins should show Bin Designation in Information tree | Also applies to run API. | Program UI | Bug | Minor | 4803 | 21.04.00-a | 21.04.00-p, 21.04.03-a |
| FFDC-10083 | The filter "Alert Message" in Alert Reports does not work | | Database | Bug | Minor | 4833 | 20.04.01-a | 20.08.00-x, 20.12.00-o, 21.04.00-p, 21.04.03-a |
| FFDC-10079 | Trigger Secondary validation could give incorrect error | | I/O Channels | Bug | Minor | 4819 | | 21.04.00-o, 21.04.03-a |
| FFDC-10076 | RVS DLL for CSOT2&3 sends incorrect format for TRANSACTIONID, TIMESTAMP, and CHECK_TIME | | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-p, 21.04.03-a |
| FFDC-10075 | RVS DLL for Seeya should use Certified Message delivery | | Connections | Bug | Minor | 4346 | 21.04.00-a | 21.04.00-p, 21.04.03-a |
| FFDC-10074 | Acquisition Node Web Service should not include File Import Chamber (50) in tool-level <AcqStatus> | | API | Bug | Minor | 4732 | | 21.04.00-o, 21.04.03-a |
| FFDC-10073 | Latest Health is not updated on the FabGuard Web | | Web | Bug | Minor | | | 21.04.00-o, 21.04.03-a |
| FFDC-10070 | Error resolving Bin's Alias for acquisition if Recipe contains a not-yet-resolved Bin with the same parameters | | Acquisition | Bug | Major | 4805 | 21.04.00-b | 21.04.00-n, 21.04.03-a |
| FFDC-10067 | TOI should work for SPTS Dsi-V (8-sided) tool type | | TOI | Bug | Minor | 3997 | 20.08.02-a | 20.12.00-o, 21.04.00-n, 21.04.03-a |
| FFDC-10060 | In Multi Tool I/O Channel Manager, paste can delete I/O Channels | | I/O Channels | Bug | Minor | 4661 | | 21.04.00-n, 21.04.03-a |
| FFDC-10059 | TOI for LAM 2300 can cause FabGuard IPM to crash | | TOI | Bug | Medium | | | 21.04.00-n, 21.04.03-a |
| FFDC-10057 | Retrieving Alerts as part of other Reports has an error in Postgres database | Since Postgres does not support LIKE matching for numeric columns, Chamber Number cannot be a wild card. For retrieving Alerts as part of other Reports, FabGuard used a wild card. Also, Alerts created by versions before 20.04.03 were not retrieved under some conditions. | Database | Bug | Medium | 4762 | | 20.08.00-x, 20.12.00-o, 21.04.00-m, 21.04.02-b, 21.04.03-a |
| FFDC-10054 | Connection Summary on FabGuard Web should correctly label ModBus/TCP Sensor connections | Not: this applies to only Sensor, not Gauge, ModBus/TCP connection. | General | Bug | Minor | 4738 | | 21.04.00-l, 21.04.02-b, 21.04.03-a |
| FFDC-10052 | Sensor Acquisition Control may not allow the user to change Step's Relay setting | | Program UI | Bug | Minor | 4758 | | 20.08.00-x, 20.12.00-o, 21.04.00-m, 21.04.02-b, 21.04.03-a |
| FFDC-10050 | In Recipe's Tool Bin configuration, changing filters can loose all the edits performed directly in the grid | Changes to display filters looses changes since the last Bin Add, Edit, or Copy. | Program UI | Bug | Medium | 4737 | | 21.04.00-l, 21.04.02-b, 21.04.03-a |
| FFDC-10049 | Connection Summary on FabGuard Web should show connections for Brooks GF100 gauges | For connections that are used to communicate multiple gauges FabGuard will now show at least one entry even if all gauges are missing. | General | Bug | Minor | 4738 | | 21.04.00-l, 21.04.02-b, 21.04.03-a |
| FFDC-10048 | Cannot exit Advanced Connections dialog due to HMI path error | The HMI parameters are will not be tested if Facility capability is not enabled.. | General | Bug | Minor | 4739 | | 21.04.00-l, 21.04.02-b, 21.04.03-a |
| FFDC-10047 | "Filter Time column" global preference cannot be set to "Any" | | General | Bug | Minor | 4748 | | 21.04.00-l, 21.04.02-b, 21.04.03-a |
| FFDC-10046 | Augent communication is not retrieving concentrations correctly | | Sensors | Bug | Minor | 4743 | 21.04.02-a | 21.04.02-b, 21.04.03-a |
| FFDC-10045 | Sensor scans cannot be loaded, causing the Runs not to load | | General | Bug | Medium | 4743 | 21.04.02-a | 21.04.02-b, 21.04.03-a |
| FFDC-10044 | SECS DLL for Host TianMa WH should not include any status SVIDs in S6F29 | | Connections | Bug | Minor | 3824 | | 21.04.00-l, 21.04.03-a |
| FFDC-10037 | PrismaPlus and QMG7xx RGAs incorrectly show only one filament | | Sensors | Bug | Medium | 4722 | 21.04.01-a | 21.04.02-a |
| FFDC-10036 | Report and Model cache files may not always save | | Analysis | Bug | Major | | | 21.04.00-k, 21.04.02-a |
| FFDC-10033 | RVS DLL for CSOT2&3 should use Machine Name rather than Tool Description to check if incoming DAILYCHECKENDFORFDC message is for this FabGuard | | Connections | Bug | Minor | 4605 | 21.04.00-a | 21.04.00-k, 21.04.02-a |
| FFDC-10031 | SmartFDC UI 1.1.3 | | Web | Bug | Minor | | 21.04.00-a | 21.04.00-j |
| FFDC-10030 | Translate on deploy does not apply to I/O channels not marked as Alias | | I/O Channels | Bug | Minor | | 19.02.00-a | 20.04.00-s, 20.08.00-x, 20.12.00-o, 21.04.00-k, 21.04.02-a |
| FFDC-10029 | "Utilization by Tool and Chamber" plot does not correctly color by Acquisition trigger | | Program UI | Bug | Minor | 4712 | | 20.08.00-x, 20.12.00-o, 21.04.00-j, 21.04.02-a |
| FFDC-10025 | Analysis Health calculation may not always be performed | If only some Chambers have SPC Reports, timing may not allow calculation of Analysis Health. | Analysis | Bug | Medium | | | 21.04.00-k, 21.04.02-a |
| FFDC-10024 | Drill down in Alarm Manger for 'Analysis Health could not be performed' Alarm does not work if History splits exist | | General | Bug | Minor | 4506 | | 20.08.00-x, 20.12.00-o, 21.04.00-j, 21.04.02-a |
| FFDC-10023 | Anomaly model produces very high value score | Issue due to envelope becoming very small. | Analysis | Bug | Minor | | | 21.04.00-j, 21.04.02-a |
| FFDC-10020 | SECS DLL for Varian VIISta 10 P2LAD should use U4 format for RPTID | | Connections | Bug | Minor | | | 21.04.00-j, 21.04.02-a |
| FFDC-10017 | Last apply time for Models is not shown in Active Analysis | Effects only not Anomaly models | Program UI | Bug | Minor | | | 21.04.00-i, 21.04.02-a |
| FFDC-10016 | Calculation of worst Anomaly for a Lot Summary uses Number Out rather than Sum Out | In Lot Summary Report, Data Table the "Anomaly Worst Normalized Distance Outside" column had the wrong value. Change to Sum out. | Analysis | Bug | Minor | | | 21.04.00-i, 21.04.02-a |
| FFDC-10015 | Upgrading SQL Server database from <19.09.00 to >=19.09.00 could lose Figures of Merit created by <8.5.7 | | Database | Bug | Minor | | 19.09.00-a | 20.08.00-x, 20.12.00-o, 21.04.00-i, 21.04.02-a |
| FFDC-10013 | Real Time SPC analysis does not add to Report Result table or process metrics | One of the consequences is that viewing the SPC Reports does not show SPC levels. Also M of N did not work. | Analysis | Bug | Medium | | 20.12.02-a | 21.04.00-h, 21.04.02-a |
| FFDC-10011 | "Analysis Rejection by Process Abort Trigger" is repeated twice in the dropdown | | Program UI | Bug | Minor | 4619 | | 20.04.00-s, 20.08.00-w, 20.12.00-o, 21.04.00-h, 21.04.02-a |
| FFDC-10008 | Anomaly models prior to 21.04.00 are not forced to use new parameter values | | Analysis | Bug | Minor | | | 21.04.00-h, 21.04.02-a |
| FFDC-10007 | File importer (ASML PAS 5500 AWE) - run creation failure | | General | Bug | Major | 4660 | | 20.04.00-s, 20.08.00-w, 20.12.00-o, 21.04.00-h, 21.04.02-a |
| FFDC-10005 | Parsing SECS Trigger Secondaries by Index or Heirarchy from event reports does not work if ASCII items contain CR+LF | | Connections | Bug | Minor | | | 20.04.00-s, 20.08.00-w, 20.12.00-o, 21.04.00-h, 21.04.02-a |
| FFDC-10004 | RVS DLL for CSOT2&3 minor fixes for outgoing DAILYCHECKENDFORFDC message | 1. LINENAME should be FabGuard's Tool Description. 2. PARAM_NAME should not contain spaces. | Connections | Bug | Minor | 4355 | 21.04.00-a | 21.04.00-g, 21.04.02-a |
| FFDC-10003 | 20.12.04 anomaly models do not properly load | | Analysis | Bug | Medium | | 21.04.00-a | 21.04.00-g, 21.04.02-a |