

GE Healthcare  
Life Sciences

# UNICORN™ 5.31

## Information Letter





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# 1 Introduction

This Information letter contains descriptions of different scenarios that may occur when UNICORN 5.31 is used. If applicable, actions to avoid or correct problems resulting from the described scenarios are suggested.

This information is valid for UNICORN 5.31 software (build 5.31.743.005) and the following systems:

- ÄKTAdesign™ systems:
  - ÄKTExplorer™ 100
  - ÄKTExplorer 100Air
  - ÄKTExplorer 10
  - ÄKTExplorer 10S
  - ÄKTExplorer 10 XT
  - ÄKTapurifer™ 10
  - ÄKTapurifer 10 XT
  - ÄKTapurifer 10 plus
  - ÄKTapurifer UPC 10
  - ÄKTapurifer 100
  - ÄKTapurifer 100 plus
  - ÄKTapurifer UPC 100
- ÄKTAdesign™ systems:
  - ÄKTAFPLC™
  - ÄKTAbasic™ 10
  - ÄKTAbasic 10 XT
  - ÄKTAbasic 100
  - ÄKTAmicro™
  - ÄKTA™ Oligopilot™
  - ÄKTApilot™
  - ÄKTExpress™
  - ÄKTAcrossflow™
- Ettan™ design systems:
  - Ettan LC
  - Ettan microLC
  - BioProcess™
  - ÄKTApocess™
  - UniFlux™
  - ÄKTAcrossflow™
  - OligoPilot
  - OligoProcess™

## Operating systems

UNICORN 5.31 has been verified on the following operating systems:

- Windows™ XP (Professional with SP3 installed, 32-bit version only)
- Windows 7 (Professional, 32-bit and 64-bit, US version)

## Controller units

UNICORN 5.31 has been verified for use with the following Controller units:

- CU-950
- CU-960

The changes implemented in UNICORN 5.31 compared to the previous version 5.30 are described in *UNICORN 5.31 vs 5.30 Software Change Description 28-9973-79 AA*.

## 2 Cautionary Notes

### 2.1 General

The following scenarios concern miscellaneous general issues in UNICORN 5.31.

	Scenario	Action
1	Using the online manuals or help files allows the user even in "single application mode" to use the browser to access the computer hard disk. <i>Ref nbr 13</i>	Restrict the operating system on user level using the Policy Editor. Alternatively, choose not to install the online-manual.
2	After performing backup to a removable disk, regardless of the amount of disks needed, the zip-utility will always ask to insert the first disk of the Multi-Volume set. <i>Ref nbr 52</i>	Click the <b>OK</b> button and further disregard this message.
3	When naming Method and Result Files, remember that the characters \ / : * ? " < > and   are not allowed in filenames in Windows. <i>Ref nbr 50</i>	No further action required.
4	UNICORN will not be able to connect to the system(s) if you logoff from Windows, logon as a different user, and then start UNICORN. <i>Ref nbr 108</i>	Do not logoff from Windows, just logoff and logon to UNICORN. If you have logged off from Windows, shut down and restart the computer, then start UNICORN and connect to the system(s).
5	Systems settings and calibration values are reset when the strategy for a system is changed. <i>Ref nbr 109</i>	Check default values for <b>System Settings</b> before the strategy change and recalibrate all relevant modules afterwards.
6	Commas may not be used a separators for decimal values. <i>Ref nbr 110</i>	Use decimal points as separators.

	Scenario	Action
7	<p>UNICORN does not acknowledge a <b>Pause/Continue</b> command made directly on the system.</p> <p><i>Ref nbr 111</i></p>	<p>Our recommendation is that the System Setting <b>Keyboard</b> always be set in <b>KeyLocked</b> mode (the default setting).</p>
8	<p>In some installations the HP DeskJet 895 will not print documents from UNICORN in landscape mode.</p> <p><i>Ref nbr 112</i></p>	<p>Do not use the printer driver for HP DeskJet 895 that is supplied with Windows. Select the printer driver for HP DeskJet 855C instead.</p>
9	<p>Problem when selecting a folder in browse folder dialogs.</p> <p><i>Ref nbr 185</i></p>	<p>Select a folder by moving to its parent and select the preferred folder there. It is also possible to select the folder which contents is visible by selecting its "go to parent" icon.</p>
10	<p>UNICORN requires permission for the operating system user to write in the windows registry. The permission is set according to document <b>registryPermissions.ppt</b>.</p> <p><i>Ref nbr 196</i></p>	<p>Set permission for all operating system users that will be running UNICORN according to document <b>registryPermissions.ppt</b>.</p>
11	<p>Error message <b>Unable to connect to system</b> is displayed when starting UNICORN directly after starting up the PC.</p> <p><i>Ref nbr 199</i></p>	<p>Wait until the start up procedure of the PC is completed before starting UNICORN. UNICORN requires that some background processes is up and running in order to connect to systems.</p>
12	<p>Unauthorized persons may be able to log on if UNICORN users are using too weak passwords. This applies to both log on passwords and to temporary lock passwords.</p> <p><i>Ref nbr 225</i></p>	<p>Use strong passwords.</p>
13	<p>In Windows 7 it is possible to "Pin this program to task bar" using the right mouse button. If UNICORN is selected, it is pinned to the taskbar and will be available even after it is closed.</p> <p><i>Ref nbr 244</i></p>	<p>This function is not supported by UNICORN and should not be used.</p>

## 2 Cautionary Notes

### 2.1 General

	Scenario	Action
14	The system is going to be turned off.	Shut down Windows properly before turning off the main power of the system.
15	Files that UNICORN needs to write to are locked because of a virus scan in the UNICORN folder.	Avoid virus scanning the UNICORN folder since some scanning software can lock files that UNICORN needs to write to.
16	External software can affect the UNICORN software.	As a first step of troubleshooting, remove or deactivate any external software installed on the computer.



## 2.2 Installation

The following scenarios concern the installation of UNICORN 5.31.

	Scenario	Action
1	There is an error in the OPC Manual. The error affects customers that use OPC for communication over a network. Depending on the network settings it is sometimes necessary to edit the <b>Authentication Level</b> . <i>Ref nbr 154</i>	Set the <b>Authentication Level</b> to <b>None</b> instead of <b>Default</b> . The COM server (or the computer) must be restarted before OPC is used.
2	There is an error in the OPC Manual. The error affects customers that use OPC for communication over a network. In Chapter 3 it says "Change Identity from <b>The interactive user</b> to <b>The launching user</b> ". It should be the other way around: "Change Identity from <b>The launching user</b> to <b>The interactive user</b> ". The corresponding image shows the correct settings. <i>Ref nbr 155</i>	Change Identity from <b>The launching user</b> to <b>The interactive user</b> . The COM server (or the computer) must be restarted before OPC is used.
3	The Uniflux 120 is not selectable during installation and no information is presented in the <b>Select system type</b> window.	Select <b>ÄKTAcrossflow</b> system type instead.

## 2.3 UNICORN Manager

The following scenarios mainly concern functions in the UNICORN 5.31 **UNICORN Manager** module.

	Scenario	Action
1	It is strongly recommended not to interrupt the backup process. <i>Ref nbr 65</i>	No further action required.
2	It is not possible to restrict the ability to use the <b>CONTINUE</b> function in the System Control module. All users are able to use the <b>CONTINUE</b> function regardless of their access rights. <i>Ref nbr 114</i>	No further action required.

## 2 Cautionary Notes

### 2.3 UNICORN Manager

	Scenario	Action
3	When an <b>Access Group</b> is renamed, it is possible to set it to an “empty string”. <i>Ref nbr 243</i>	Always add a name to an <b>Access Group</b> .

## 2.4 Method Editor

The following scenarios mainly concern functions in the UNICORN 5.31 **Method Editor**.

	Scenario	Action
1	When a name of a block is changed/replaced in text instructions mode, a complete new block will be created, while the complete old block will be moved to ( <b>Unused</b> ). <i>Ref nbr 4</i>	Rename the block by the <b>Rename Block</b> command in the <b>Block</b> drop down menu
2	If you choose a column for a method made for a non-ÅKTAdesign system, there will be no question about <b>Column Value Update</b> as with ÅKTAdesign systems. <i>Ref nbr 100</i>	Update the <b>Column</b> instructions in the method.
3	To be sure that the gradient function works properly, we recommend that the entire gradient be structured in one block, where the <b>End Block</b> and <b>Gradient_Length</b> have the same value. <i>Ref nbr 115</i>	No further action required.
4	The list of techniques available for selection includes only techniques used for ÅKTAdesign systems. <i>Ref nbr 116</i>	Select technique <b>Any</b> for other systems
5	When creating new templates for BioPilot and FPLC systems, you have to set <b>Column</b> to <b>Any</b> in order to save as a new template. <i>Ref nbr 117</i>	No further action required.
6	Methods can not be opened in versions older than the one where they were created. I.e. UNICORN is not forward compatible. <i>Ref nbr 146</i>	Create methods with the software that will run them.
7	It is possible to copy and paste an Oligo sequence within the Oligo sequence text field even though the option <b>Sequence Paste</b> is deselected. <i>Ref nbr 245</i>	No further action required.

### Method Wizard

	Scenario	Action
1	When making a new method that differs substantially from the latest made with the Method wizard, we recommend that you click the <b>Set Default</b> button in the initial Method wizard dialog.  <i>Ref nbr 113</i>	No further action required.

## 2.5 System Control

The following scenarios mainly concern functions in the UNICORN 5.31 **System Control** module.

	Scenario	Action
1	When UNICORN is installed without password protection, and a method containing a message instruction that needs to be authorized, this message dialog cannot be shut down and the instrument will run in infinite pause mode.  <i>Ref nbr 19</i>	Installation without password disables the confirm/sign function for a user. Therefore do not use authorization when UNICORN is installed without password protection.
2	UNICORN will not notify the user when free capacity of the storage disk is insufficient for saving the ongoing run. When possible, the data of the ongoing run will be stored in the <b>Failed</b> folder.  <i>Ref nbr 95</i>	No further action required.
3	When using a variable wavelength detector (Monitor UV-900) UV curves are automatically given names containing the UV wavelength. Names are displayed together with the curve in the System Control curve window. At the end of a run the curve name is changed back to its default name but the curve data from the run is still seen in the window and therefore the curve and curve name do not match.  <i>Ref nbr 118</i>	No action required. UV curves are always stored in the result file with the correct wavelength information in the curve name.

	Scenario	Action
4	<p>If you execute the instructions <b>Record_on</b> and <b>End_Timer</b> or <b>Pause_Timer</b> simultaneously during manual runs, there is a possibility that the run will go on infinitely.</p> <p><i>Ref nbr 119</i></p>	<p>Do not execute the instruction <b>Record_on</b> simultaneously with an <b>End_Timer</b> or <b>Pause_Timer</b> instruction.</p>
5	<p>If you press the <b>Continue</b> button during <b>PumpWash</b> execution the Pump module may be set in <b>End</b> mode although the method continues to execute. This affects the whole method execution and will most probably give incorrect results.</p> <p><i>Ref nbr 120</i></p>	<p>Never press <b>Continue</b> during <b>PumpWash</b> execution.</p>
6	<p>The tuning dialog has disappeared from the <b>System</b> menu after upgrading from UNICORN 4.12 or earlier.</p> <p><i>Ref nbr 187</i></p>	<p>Get an updated strategy that includes feedback tuning settings or install UNICORN 4.12 or later.</p>
7	<p>The communication between the PC and the <b>CU950 advanced mode</b> fails and then re-establishes by itself within 10 seconds when the PC goes into standby mode or hibernation mode.</p> <p><i>Ref nbr 205</i></p>	<p>No data is lost so no action is needed. However, it is possible to switch off the standby and hibernation feature in the power options in the control panel of the PC.</p>
8	<p>Before starting a method using the OPC interface, it is important to set the result file name using the OPC interface. The result file name algorithm in the method is not used.</p> <p><i>Ref nbr 238</i></p>	<p>No further action required.</p>
9	<p>Logging out from Windows during a manual or a method run will stop the UNICORN background process receiving data from the CU-950 or CU-960.</p>	<p>Do not log out from Windows during a manual or a method run.</p>

## 2 Cautionary Notes

### 2.5 System Control

	Scenario	Action
10	<p>The Windows user has been logged out, or the computer has been shut down during a manual or a method run. When the computer has restarted and the user has logged on to Windows, the controls in <b>System Control</b> are grayed out during the data upload from CU-950 or CU-960.</p> <p><b>Note:</b> <i>Data upload is only possible if it is an Ethernet connection between the computer and the CU, and if the CU has a flash memory installed.</i></p>	<p>Let the data completely upload from the CU-950 or CU-960. <b>Run Data Instruments</b> will change from <b>Uploading</b> to <b>Ready</b> when the upload is complete.</p>

## 2.6 Evaluation

The following scenarios mainly concern functions in the UNICORN 5.31 **Evaluation** module.

	Scenario	Action
1	When recalculating values manually, the obtained value will differ from the one calculated by UNICORN as UNICORN only shows the first few decimal digits of the values, while the software calculates with more decimal digits. <i>Ref nbr 17</i>	No further action required.
2	No titles on report printouts from batch run Evaluation procedure. <i>Ref nbr 145</i>	Use the <b>File:Report</b> command.
3	Not possible to start batch run without having a result file open. <i>Ref nbr 150</i>	Open any result file and choose batch run.
4	When the <b>Result Name</b> is changed in the <b>Start Protocol</b> when starting a method, the <b>Result Directory</b> in the <b>Result Name</b> tab of the <b>Documentation</b> will reflect the <b>Result Directory</b> as defined in the Method Editor. However, the <b>Result Name</b> in the <b>Result Information</b> tab will reflect the changes made in the <b>Start Protocol</b> . <i>Ref nbr 53</i>	No further action required.
5	When a system is controlled remotely, and the result is saved locally, this result file will not show up in the <b>Recent Runs</b> tab on the controlling computer. <i>Ref nbr 8</i>	Open the result file on the remote computer using the UNICORN Manager or setup a network including the local disk of the remote computer.

## 2 Cautionary Notes

### 2.6 Evaluation

	Scenario	Action
6	<p>In the <b>Results Information</b> tab in the <b>Documentation</b> window, timezones may differ between <b>Date of creation</b>, <b>Date of last modification</b> and <b>Strategy date</b>. <b>Date of creation</b> and <b>Strategy date</b> are based on the computer's settings, while <b>Date of last modification</b> is based on the settings of the computer where the last modification is made.</p> <p><i>Ref nbr 11</i></p>	No further action required.
7	<p>When exporting curves to AIA-format using <b>File:Export:Curves</b> will overwrite any previously saved similar AIA curves without warning.</p> <p><i>Ref nbr 63</i></p>	Use the <b>File:Export:Export Curve to AIA</b> command.
8	<p>Only the curves belonging to the active chromatogram can be selected in the <b>Report</b> format.</p> <p><i>Ref nbr 94</i></p>	No further action required.
9	<p>The table in <b>Operations:Fraction Histogram</b> does not exist.</p> <p><i>Ref nbr 147</i></p>	The table has moved and has been extended. It is now found as a pool table in <b>Operations:Pool</b> .



## 2.7 Controller Units

The following scenarios mainly concern functions of the Controller Units when using UNICORN 5.31.

### General

	Scenario	Action
1	<p>When method instructions of the same type is placed on the same breakpoint, a delay mechanism is used on the Controller Unit (CU), to let each instruction be executed correctly.</p> <p>If another instruction is placed between these instructions, the delay mechanism is not used.</p> <p><i>Ref nbr 242</i></p>	No further action required.
2	<p>Do not configure a firewall to filter the communication between the computer and the CU-950 or CU-960.</p> <p><b>Note:</b> <i>This can only be done when connected in advanced mode.</i></p>	No further action required.

### CU-950

	Scenario	Action
1	<p>When running method queues on several systems connected to the same CU-950 Advanced, it is recommended to avoid burdening the network as this might lead to pausing the method queues.</p> <p><i>Ref nbr 2</i></p>	No further action required.
2	<p>If two local drivers on separate computers are configured to use the same CU-950 Advanced controller unit, the CU-950 Advanced will stop responding.</p> <p><i>Ref nbr 24</i></p>	Ensure that local drivers on separate computers do not use the same CU-950 Advanced controller unit.

## 2 Cautionary Notes

### 2.7 Controller Units

	Scenario	Action
3	In rare cases, such as heavy network load, the system reports <b>Communication broken</b> when recovering data after a network failure. <i>Ref nbr 157</i>	No action needs to be taken. The data is fully recovered.
4	The USB cable between the CU-950 and the PC has accidentally been unplugged. <i>Ref nbr 160</i>	Wait until the PC LED on the CU-950 starts to blink before reconnecting the USB cable.
5	Loss of data after a communication error when running with an advanced CU-950 without the compact flash. <i>Ref nbr 193</i>	Alter settings in <b>System Control:System:Settings:Control Unit</b> from <b>CONTINUE</b> to <b>PAUSE</b> .

## 3 Deviations

### 3.1 General

The following scenarios concern miscellaneous general functions in UNICORN 5.31.

	Scenario	Action
1	Depending on the operating system, it might happen that the time indication in the report format is missing. <i>Ref nbr 25</i>	Change time format in the operating system.
2	When, for some reason, the computer needs to be restarted during the chromatography run, the first new chromatogram according to the instruction <b>New_Chromatogram</b> in the running method will be named a default name. All other chromatograms will be stored correctly. <i>Ref nbr 30</i>	No further action required.
3	Message boxes from the system control module are obscured by another application window when running in "single application mode". <i>Ref nbr 224</i>	Keep the system control window on top while not working in other applications. Use <b>Alt-Tab</b> to switch to the system control regularly if you are doing much work in another application.

### 3.2 UNICORN Manager

The following scenarios mainly concern functions in the UNICORN 5.31 **UNICORN Manager** module.

	Scenario	Action
1	When double-clicking on a method in the UNICORN Manager, occasionally the default method is opened instead of the method that was intended.. <i>Ref nbr 1</i>	Try to re-open the method once more.

### 3 Deviations

#### 3.2 UNICORN Manager

	Scenario	Action
2	Occasionally, when the UNICORN Manager is left while performing backup to multiple disks, the UNICORN Manager will stall when it is opened again, in response to a dialog window in the UNICORN Manager. <i>Ref nbr 12</i>	Do not activate another window while performing a backup. Alternatively, do the backup to a disk that has sufficient free space to contain the complete backup file.
3	The names of imported old methods may have to be changed to have a <b>mXX</b> file extension. <i>Ref nbr 103</i>	Replace "XX" in the file extension with the number of the specific system the method is assigned to. If you only have one system connected, the file extension should be <b>m01</b> .

### 3.3 Method Editor

The following scenarios mainly concern functions in the UNICORN 5.31 **Method Editor**.

	Scenario	Action
1	When a dialog window is opened in the Method Editor module, opening a method file using the UNICORN Manager will cause the Method Editor module to stop responding. <i>Ref nbr 14</i>	Close all dialog windows in the Method Editor module before opening another method file.
2	Occasionally, the operating system settings will cause the Method Editor to fail to open automatically when double-clicking a method in the UNICORN Manager. <i>Ref nbr 15</i>	Double-click once more on the method. Alternatively, open the Method Editor manually by clicking on the Method Editor tab.
3	Variables that are defined in blocks below level 10 in the call chain are always shown as <b>Unused variables</b> even if they are used. Also, variables in an infinite loop may be defined as <b>Unused</b> incorrectly. <i>Ref nbr 18</i>	Check <b>Show unused variables</b> and <b>Show details</b> to show all variables.

Scenario	Action
<p>4 When the <b>Base</b> of a block changes to a volume dependent base, based on the sample pump with the command <b>Method-Base Samplepump</b>, the method will continue to calculate on the system pump's volume changes.</p> <p><i>Ref nbr 42</i></p>	<p>Keep the system pump running at the same flow rate as the sample pump when changing <b>MethodBase Samplepump</b>.</p>
<p>5 Sometimes variables may be missing from the <b>Variables</b> tab on the <b>Run Setup</b>.</p> <p><i>Ref nbr 121</i></p>	<p>Click the <b>Show details</b> and <b>Show unused variables</b> checkboxes. This will display all variables.</p>
<p>6 Sometimes infinite loops may be indicated when a text method is printed.</p> <p><i>Ref nbr 122</i></p>	<p>The indications can be ignored if this hasn't been noted in the Method Editor text view or in the <b>Run Setup</b>.</p>
<p>7 If you set a <b>Gradient</b> instruction before <b>PumpWash</b> (at the same breakpoint), the gradient will go to the target immediately (with length 0). However, the gradient profile in the Method Editor will show the gradient as if it followed the normal set length.</p> <p><i>Ref nbr 123</i></p>	<p>Place the <b>Gradient</b> instruction on another breakpoint after the <b>PumpWash</b>.</p>
<p>8 In some cases the unit and tick marks on the x-axis do not match in the gradient diagram when switching to and from the gradient window. This is a visual effect only. It does not affect the method run in any way.</p> <p><i>Ref nbr 148</i></p>	<p>No further action required.</p>
<p>9 A vertical line may appear at break point in the gradient diagram when switching to and from the gradient window. This is a visual effect only. It does not affect the method run in any way. The effect has only been found in editions earlier than 5.0.</p> <p><i>Ref nbr 149</i></p>	<p>No further action required.</p>

	Scenario	Action
10	<p>In rare cases the column list may get corrupted or may get empty. This will only occur if the list is not stored locally on the UNICORN computer. This may occur if the column list is edited frequently by several users or is edited over an unreliable network connection.</p> <p><i>Ref nbr 164</i></p>	<p>Actions to minimize the problem are:</p> <ul style="list-style-type: none"> <li>• Stabilize the network,</li> <li>• Minimize the size of the column list,</li> <li>• Restart computers regularly,</li> <li>• Set up users so that only one user is allowed to edit the column list,</li> <li>• Backup the column list regularly.</li> </ul>
11	<p>Syntax error in block after a block import. Blocks containing columns are not imported correctly.</p> <p><i>Ref nbr 173</i></p>	<p>Replace the (commented out) instruction containing the column with a new identical one.</p>
12	<p>Importing blocks to a method may fail when blocks have the same names in the two methods.</p> <p><i>Ref nbr 210</i></p>	<p>Rename blocks in the method in the Method Editor so that no name collisions will occur when importing</p>
13	<p>When in the <b>Run Setup:Result Name Tab</b> and entering a new name in the <b>Scouting subdirectory</b> field, clicking on other tabs and then returning to the <b>Result name</b> tab may cause the new scouting subdirectory name to revert back to the original name.</p> <p><i>Ref nbr 219</i></p>	<p>If you enter a new name in the <b>Scouting subdirectory</b> field then save the method and reopen it without navigating to any other tabs, the new name should be stable. You can then navigate through any other tabs without losing the new name.</p>
14	<p>For cross flow filtration:</p> <ul style="list-style-type: none"> <li>• The variable <b>TMP_For_PrePost</b> (detail variable) will be assigned the value 0, when the user creates a method for Hollow Fibre and choose <b>Other</b> from filter list. This will affect the <b>Preproduct</b> and <b>Postproduct</b> steps in such way that the permeate pump will not start when it should.</li> </ul> <p><i>Ref nbr 228</i></p>	<p>After creating the method, choose <b>Run setup</b> and look in the <b>Variables</b> tab. Make sure that <b>Show detail</b> is checked. Look for variable <b>TMP_For_Pre-Post</b>, change its value from 0 bar to 1 bar and save the method.</p>

## 3.4 System Control

The following scenarios mainly concern functions in the UNICORN 5.31 **System Control** module.

	Scenario	Action
1	<p>When a method using BufferPrep failed to start because of a compilation error in the method, the command <b>BufferPrep ON 1</b> will appear as the first line in the <b>Logbook</b> as soon as a new method is started, regardless whether or not this new method contains a BufferPrep command. After this notification in the logbook, the base is reset and the normal logbook for the new method is displayed.</p> <p><i>Ref nbr 26</i></p>	No further action required.
2	<p>When running 4 systems from the same computer over the network, and all 4 systems end simultaneously, creating very large result files, some of these files may be stored in the <b>\Failed</b> directory.</p> <p><i>Ref nbr 28</i></p>	No further action required.
3	<p>A pause-action in response to an error will not be sent to the instrument if such an error occurs while the communication between the computer and the CU-950 controller unit is lost.</p> <p><i>Ref nbr 31</i></p>	No further action required.
4	<p>If an <b>End or Pause Timer</b> is activated manually before a method is started, the timer will still be active, although it is not registered in the logbook.</p> <p><i>Ref nbr 36</i></p>	When an <b>End or Pause Timer</b> is activated manually, the manual run should first be ended before the next method is started.

### 3 Deviations

#### 3.4 System Control

	Scenario	Action
5	<p>The base of a <b>Watch</b> function will be used in the logbook as soon as the condition occurs, regardless of the base of the block that is ongoing at that time. If a <b>Hold_Until</b> command is used at that point, the base that is recorded in the logbook will then be the base that is used in the <b>Watch</b> function when the condition occurs, even if this is not the base for the <b>Hold_Until</b> function. However, this discrepancy only applies to the logbook.</p> <p><i>Ref nbr 38</i></p>	No further action required.
6	<p>System Control will stop responding if the user edits the tube number variable, belonging to the <b>Start At</b> parameter for the Frac-950 instructions <b>Fractionation</b> and <b>Peak_Fractionation</b>, on the <b>Scouting</b> tab of the documentation at the same time as the run ends.</p> <p><i>Ref nbr 40</i></p>	Avoid editing these values during runs if possible.
7	<p>The hatches in a chromatogram, created by the <b>Hatch</b> function on the <b>Curve Style and Color</b> tab are missing when printing.</p> <p><i>Ref nbr 47</i></p>	No further action required.
8	<p>System name and Strategy information is not registered in <b>Documentation</b> when performing a manual run.</p> <p><i>Ref nbr 49</i></p>	Document the system name and strategy information in the <b>Notes</b> tab of the <b>Documentation</b> .



Scenario		Action
9	<p>If a method compilation error appears when trying to run a BufferPrep mode method, the method does not start but the BufferPrep recipe is still downloaded to the Pump instrument module. An error will then occur as soon as another BufferPrep recipe is downloaded, e.g. if you try to run a BufferPrep method again. This error will also occur when a BufferPrep recipe is selected manually before a method running in BufferPrep mode is started and when running a method which includes BufferPrep.</p> <p><i>Ref nbr 124</i></p>	<p>To “remove” the downloaded BufferPrep recipe from the Pump module, execute any instruction, e.g. a <b>Flow</b> instruction, and then press the <b>End</b> button. (The dummy instruction must be executed for the <b>End</b> button to be enabled.) This action applies to all situations where you want to abort BufferPrep mode.</p>
10	<p>If an <b>ALARM</b> event occurs during <b>PumpWash</b>, the system is paused as intended but is continued when <b>PumpWash</b> has ended. The same applies to the <b>SystemWash</b> instruction. Normally, the system will remain in <b>Pause</b> after an <b>ALARM</b>.</p> <p><i>Ref nbr 125</i></p>	<p>No further action required.</p>
11	<p>Error when running evaluation procedure in the first scouting run. If the evaluation procedure contains an export command then an error may occur after the first run in a scouting sequence.</p> <p><i>Ref nbr 170</i></p>	<p>Run the evaluation procedure from the procedure editor instead.</p>
12	<p>Decimals are missing on the x- and y-axis in graphs.</p> <p><i>Ref nbr 171</i></p>	<p>No action is needed. The problem is a display problem only. The graphs and the axis are correct in other respects.</p>
13	<p>The result file may be missing after a long (e.g. a 24-hour) manual run.</p> <p><i>Ref nbr 197</i></p>	<p>It is recommended to run a method instead in these cases.</p>

### 3 Deviations

#### 3.4 System Control

	Scenario	Action
14	<p>Run errors that occur when no UNICORN application GUI is open are not shown and are not possible to clear.</p> <p><i>Ref nbr 202</i></p>	<p>Clear the error by restarting the CU and the PC.</p> <p><b>Note:</b> <i>In some systems the CU is integrated in the PC. The error can then be found in the system audit trail in the UNICORN Manager application.</i></p>
15	<p>There may be problems, like missing data in the result or a computer restart, when running method queues with long periods of waiting (over 6 hours) between method endings and the start of the next method.</p> <p><i>Ref nbr 233</i></p>	<p>Avoid long idle periods within method queues.</p>
16	<p>When pressure has been calibrated and the flow re-started the pressure values on screen in System Control show zero pressure.</p> <p><i>Ref nbr 129</i></p>	<p>Press <b>End</b>. Restart Flow.</p>
17	<p>Calibrations made directly on ÄKTAdesign system modules are logged only in the System Control logbook and not in the <b>Calibration</b> page of <b>Documentation</b> or in the <b>Audit Trail</b>. This means that the <b>Calibration</b> page and <b>Audit Trail</b> information might not be up-to-date.</p> <p><i>Ref nbr 130</i></p>	<p>Always calibrate ÄKTAdesign system modules by using the UNICORN calibration functions in System Control.</p>
18	<p>The P-900 pump will not change its mode when the system changes mode (e.g. from <b>Pause</b> to <b>Run</b> after a <b>PumpWash</b>) immediately before an airsensor alarm.</p> <p><i>Ref nbr 131</i></p>	<p>Deactivate the airsensor alarm and click <b>Continue</b>, or finish the run with the <b>End</b> command.</p>

Scenario	Action
19	<p>When using the UV-900 monitor the peak fractionation automatically ends after a certain time, which is related to the <b>MinPeakWidth</b> setting. A <b>MinPeakWidth</b> setting of 0.15 will result in max 7.5 min peak fractionation; A <b>MinPeakWidth</b> setting of 0.25 will result in max 12.5 min peak fractionation; A <b>MinPeakWidth</b> setting of 0.30 will result in max 15 min peak fractionation etc. The maximum fraction volume is 50 times the <b>MinPeakWidth</b>.</p> <p><i>Ref nbr 132</i></p>
20	<p>The system will not hold when <b>InjectionPickup</b> is performed with the A-900. This problem does not occur if the Wizard is used.</p> <p><i>Ref nbr 133</i></p>
21	<p>The following sequence will cause the outlet valve positions to be wrong when used with 10 and 100 system strategies and a Frac-900:</p> <ul style="list-style-type: none"> <li>• Insert a flowrate and fractionation command</li> <li>• Switch Outlet Valve to F1</li> <li>• Switch back Outlet Valve to F2</li> </ul> <p>This will cause the Outlet Valve to be switched to F2, but it will immediately switch back to F1. This is not noted in the logbook. Any other position than F2 for the Outlet Valve works well. The problem occurs both if the sequence is used manually or in a method.</p> <p><i>Ref nbr 134</i></p>
22	<p>Instant runs cannot be preformed using the following ÄKTA 3D Kit templates: Affinity Blank Run; Column CIP; Metal Ion Charging; Metal Ion Stripping.</p> <p><i>Ref nbr 135</i></p>

### 3 Deviations

#### 3.4 System Control

Scenario	Action
23 Peak fractionation will not work using the Frac-900 if the peaks are too close. The fractionation is cancelled and the fraction numbering is reset when this happens. The error occurs when there is approximately 1 s between the end of one peak and the beginning of the next. It is caused by the automatic valve adjustment of the Outlet Valve. <i>Ref nbr 136</i>	No further action required.
24 When the template <b>Empty</b> has been selected for a BioProcess method, the unit for the column volume in the <b>Base</b> instruction in the text window is incorrectly shown as ml. The real unit is liter. <i>Ref nbr 138</i>	Mark the <b>Base</b> instruction and click on <b>Replace</b> in the instruction dialog box to change the unit to liter.
25 Systems with a continuous sound at alarm may not sound the subsequent alarm if the <b>Continue</b> command is used before the first alarm is acknowledged. <i>Ref nbr 139</i>	Click <b>Acknowledge</b> before <b>Continue</b> .
26 When the pressure limit set in UNICORN is exceeded, it may take about one second before a run is paused. <i>Ref nbr 140</i>	For a faster response to pressure changes set the pressure limit on the pumps also.
27 A Warning message <b>Flow ignored</b> should be displayed if the instruction <b>SampleFlow</b> is active in manual mode and the user executes the instruction <b>Flow</b> . Sometimes this Warning message is not issued when <b>SampleFlow</b> is running, and the instruction <b>Flow</b> will be idle. If the user manually sets 0 ml/min as <b>SampleFlow</b> during this, the <b>Flow</b> will start. <i>Ref nbr 141</i>	Do not run <b>Flow</b> when <b>SampleFlow</b> is active.
28 Some fraction marks are occasionally omitted when the fraction collector has been started with the instruction <b>Frac:Start</b> . <i>Ref nbr 142</i>	For version 2.0 of a standard strategy, use the instruction <b>Collect</b> instead.

	Scenario	Action
29	<p>If the flow rate is changed during execution of the instruction <b>Superloop™</b>, the time for filling or emptying the Superloop is not adjusted to the new flow rate.</p> <p><i>Ref nbr 144</i></p>	<p>Do not change the flow rate when filling or emptying the Superloop.</p>
30	<p>The pump wash command sets the pulse compensation to <b>ON</b> without resetting it afterwards. This behavior could be harmful to fragile columns.</p> <p><i>Ref nbr 153</i></p>	<p>Recommended work around is to perform the pump wash manually before starting the method. Alternatively a method queue can have a pump wash method as the first step.</p>
31	<p>In rare cases the System Control module will not recognize a running system after a restart of the controlling PC during a method run. Data may be lost if this happens.</p> <p><i>Ref nbr 159</i></p>	<p>No further action required.</p>
32	<p>Sometimes racks are missing in <b>Manual:Frac</b> instructions and that an error message is shown at method start: <b>Unable to run method. Unable to load rack configuration from method ...</b></p> <p>It has been noted when using the following system configuration:</p> <ul style="list-style-type: none"> <li>• UNICORN network installation,</li> <li>• Systems with Frac-950,</li> <li>• Two systems connection to the same computer,</li> <li>• Two System Controls on the same computer</li> </ul> <p><i>Ref nbr 236</i></p>	<p>Before log off from UNICORN, disconnect the system in each System Control.</p> <p>At log on to UNICORN, connect each System Control in a sequence with some delay between connections.</p>
33	<p>The display of <b>Synthesis Data</b> in the System Control sometimes shows the wrong data.</p> <p><i>Ref nbr 241</i></p>	<p>Close the dialog and re-open it again.</p>

### System Control ÄKTExpress

	Scenario	Action
1	When pausing all ÄKTExpress systems that are running manual runs, the <b>Continue all</b> and <b>End all</b> buttons are inactive.  <i>Ref nbr 56</i>	<b>Continue</b> or <b>End</b> every system separately.
2	Wrong watch instruction is displayed as the active watch in the watch window. If two watch instructions on the same signal are called at the same breakpoint, then the first one in the run log will become the active one, but in the watch window the last one is displayed as being active.  <i>Ref nbr 213</i>	Only one watch per signal can be active at any given time. For clarity, avoid simultaneous calls to more than one watch per signal.

## 3.5 Evaluation

The following scenarios mainly concern functions in the UNICORN 5.31 **Evaluation** module.

	Scenario	Action
1	When new items are added to an existing report, and the exit function is used to close and save the modified report, an error message may appear, stating <b>The format could not be saved. The report layout file has been modified by another user . You can save this layout with a new name.</b>  <i>Ref nbr 6</i>	Save the modified report using <b>Save as</b> , under the same name as the original report.
2	In rare occasions, the result file opened in the Evaluation window is indicated as <b>file-name.rez</b> in the title bar.  <i>Ref nbr 7</i>	No action required, the result file will be treated as usual.

Scenario	Action
<p>3 Depending on the length of the result files' names, the number of result files selected and the computer's capacity, selecting a large number of results when browsing for result files in the <b>Open Curves to Compare</b> dialog window will cause an application error.</p> <p><i>Ref nbr 9</i></p>	<p>First open a smaller number of curves to compare, and then repeat this command until all curves required are displayed.</p>
<p>4 Neither the X-axis, nor the Y-axis will be updated when zooming in on the curve in the <b>Peak Selection</b> page of the <b>Multifile Peak Compare Wizard</b>.</p> <p><i>Ref nbr 21</i></p>	<p>No further action required.</p>
<p>5 The window value for the <b>Reference peak</b> for relative retention in the <b>Identification Settings</b> dialog, which is reached from the <b>Define Components</b> dialog when creating or editing a <b>Quantification Table</b> in the Analysis Module, is not used when a check is made for overlapping retention windows when the <b>Define Components</b> dialog is closed. This can result in an error message. The actual quantification however is performed with the correct values.</p> <p><i>Ref nbr 29</i></p>	<p>Temporarily switch to <b>Absolute Retention</b> in the <b>Identification Settings</b> dialog and edit the retention window for the reference peak in the <b>Define Components</b> dialog to a value that does not overlap the retention windows for the other components. Then change back to <b>Relative Retention</b> in the <b>Identification Settings</b> dialog and set the window for the reference peak.</p>
<p>6 When no printer is installed, the Evaluation module will stop responding when a <b>Preview</b> is requested in the <b>Print Chromatograms</b> window.</p> <p><i>Ref nbr 37</i></p>	<p>Install a printer.</p>
<p>7 Pooling from a simulated peak fractionation curve followed by deletion of a Pool will not cause the pooled fractions marks to disappear.</p> <p><i>Ref nbr 54</i></p>	<p>This does not affect the pooling, the pool marking will be removed and the <b>Pool Table</b> will be updated.</p>

	Scenario	Action
8	<p>On the <b>Peak Selection</b> page in the <b>Multifile Peak Compare Wizard</b>, the peak selection is removed if the <b>Set peak name</b> command is used while the corresponding checkbox is not activated.</p> <p><i>Ref nbr 69</i></p>	<p>Check any of the checkboxes before using the <b>Set peak name</b> command.</p>
9	<p>The units for <b>Vol.</b> and <b>Target vol.</b> are missing in the ÄKTExpress <b>Pool Table</b>.</p> <p><i>Ref nbr 78</i></p>	<p>The unit for <b>Vol.</b> and <b>Target vol.</b> is ml.</p>
10	<p>When several chromatograms have been imported into a single window the order in which they appear on a printout may not be as required, e.g. a comparison of several different runs at different pH may not be displayed in a consecutive numerical order of pH values.</p> <p><i>Ref nbr 126</i></p>	<p>Use the <b>Report Generator</b> to place the chromatograms in the desired positions.</p>
11	<p>If one or several chromatograms, but not all, are selected for a standard report layout, the number of actually printed pages may exceed what was selected as the desired number of pages.</p> <p><i>Ref nbr 127</i></p>	<p>Select <b>Active Chromatogram</b>, <b>All Chromatograms</b>, or select all chromatograms individually, alternatively select a Custom report format.</p>
12	<p>The bases <b>Y</b>, <b>Z</b> and <b>Q</b> are reported incorrectly in the synthesis data of the OligoPilot and OligoProcess result files. This concerns both DNA and RNA and both thiolated and oxidated bases. The bases are reported as follows: <b>Y</b> is reported as <b>Q</b>; <b>Z</b> is reported as <b>Y</b>; <b>Q</b> is reported as <b>Z</b>.</p> <p><i>Ref nbr 128</i></p>	<p>No further action required.</p>
13	<p>When opening a curve to compare into an empty chromatogram the application shows two curves with the same name.</p> <p><i>Ref nbr 191</i></p>	<p>Ensure that you have at least two shiftable curves for each unit among the selected curves. Use <b>File:Open:Curves</b> to open a single curve.</p>



	Scenario	Action
14	<p>If You run a method that has two <b>Evaluate</b> instructions on the same time/volume then curves may disappear from the result. Also curve names can become wrong (curves in chromatogram <b>15</b> can be named <b>result:14_UV</b> instead of <b>result:15_UV</b>).</p> <p><i>Ref nbr 204</i></p>	<p>Avoid to use two evaluate instructions on the same time/volume.</p>
15	<p>The help text for the <b>Copy to Clipboard</b> command is incorrect.</p> <p><i>Ref nbr 64</i></p>	<p>No further action required.</p>
16	<p>In rare cases the Evaluation module will stop working when browsing the recent run list.</p> <p><i>Ref nbr 158</i></p>	<p>No further action required.</p>
17	<p>In <b>Define plot data</b> in the Evaluation wizard for cross flow filtration:</p> <ul style="list-style-type: none"> <li>The numbers in the <b>Marker</b> position and in the table in the <b>Curve name</b> tab may differ. The reason is that the resolution may be higher in the result file than in the curve area on the screen.</li> </ul> <p><i>Ref nbr 175</i></p>	<p>No further action required.</p>
18	<p>In <b>Define plot data</b> in the Evaluation wizard for cross flow filtration:</p> <ul style="list-style-type: none"> <li>The marker bar is not repositioned when zooming.</li> </ul> <p><i>Ref nbr 176</i></p>	<p>No further action required.</p>
19	<p>At cross flow filtration, the <b>Retentate</b> volume decreases slightly at transitions between product steps when using the method wizard.</p> <p><i>Ref nbr 179</i></p>	<p>If the decrease of volume cannot be neglected then it is possible to stop the permeate pump at the end of each product step by adding a control mode stop (<b>TMP</b> or <b>Flux control</b>) in the method.</p>

## 3 Deviations

### 3.5 Evaluation

	Scenario	Action
20	<p>In <b>Capacity Plots:Define plot data</b> in the Evaluation wizard for cross flow filtration:</p> <ul style="list-style-type: none"><li>An empty gray area is visible when plotting capacity versus external signal.</li></ul> <p><i>Ref nbr 183</i></p>	The area is intentionally empty since there is no curve to show.
21	<p>Renaming curves in <b>Any vs. any</b> sequence in the Evaluation wizard for cross flow filtration:</p> <ul style="list-style-type: none"><li>The new names may get lost if the wizard's back button is used to change data in previous wizard pages.</li></ul> <p><i>Ref nbr 186</i></p>	No further action required.
22	<p>When interpolating a curve in volume base, a strange dip down to zero can sometimes be present in the beginning of the curve. The dip is not present if the same operation is performed in time base.</p> <p><i>Ref nbr 239</i></p>	No further action required.

## 3.6 Controller Units

The following scenarios mainly concern functions of the Controller Units when using UNICORN 5.31.

### General

	Scenario	Action
1	<p>The error message '<b>controller card' error {2012}: No response Air sensor, 0</b> is displayed when restarting the computer and then the controller card restarts.</p> <p><i>Ref nbr 214</i></p>	This affects the start up time of the system and there is no known workaround.

### CU-950/CU-960

	Scenario	Action
1	<p>CU indicates memory card full in CU even if that is not the case. When the Compact Flash memory on a CU-950/960 has once been full, the CU will indicate that the memory card is full when a lost communication with the CU is reestablished, even if the memory card is not full.</p> <p><i>Ref nbr 189</i></p>	<p>Shut down the CU-950/960 by unplugging the power cable and then start it again.</p>

### CU-950

	Scenario	Action
1	<p>Negative values are rounded incorrectly in alarm blocks when they are sent for display from the CU-950 to UNICORN.</p> <p><i>Ref nbr 172</i></p>	<p>No action is needed. The alarm is triggered correctly. It is a display problem.</p>
2	<p>When the CU-950 <b>Data Recovery Settings</b> is set to <b>OFF</b> for CU-950 Advanced, or CU-950 USB is used and the Control Unit loses power due to a power failure, this power failure will not be indicated in the logbook. It will however be indicated that data could not be collected from the control unit.</p> <p><i>Ref nbr 3</i></p>	<p>No further action required.</p>
3	<p>If data is stored locally on a nearly full or very fragmented harddisk, the CU-950 controller unit may in rare cases lose and regain contact with the computer when saving backup files or result files.</p> <p><i>Ref nbr 27</i></p>	<p>Either remove obsolete files from the harddisk, or defragment the harddisk.</p>





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First published Jun. 2011

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