#### Technical Note

# cellSens Well Navigator and Focus Maps



The Olympus cellSens acquisition software allows to generate focus maps using the Stage Navigator tool and XY position lists for multiwell plates using the Well Navigator tool. The following document describes how to combine these two features.

### 1. Well Navigator

• Load, calibrate and fill the sample carrier template in the usual way. Inside the wells, patterns (grids or tiles) can be defined.



### 2. Stage Navigator

• Switch to the Stage Navigator tool with the terminal well pattern and load defined (it's hard to change things later). The well positions should appear on the overview area. The following shows a 12-well carrier with a 2x2 grid pattern (zoom out if only one well is displayed):



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• Create a position group: click the "Select Positions" icons, drag a rectangle around all positions using the mouse, right click and select "Group positions" from the context menu. Choose a name. All positions should appear in red:



• Activate the "Focus Map" icon (the drop down button has further choices: 3 point or maps of varying density). Use the arrow icons to visit the focus map positions and focus at each. Visited focus map positions appear in green:

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*Tip:* you can move around focus map positions with mouse, should there be no suitable object in the default position.

• Leaving the focus map icon active, switch to the Process Manager tool and check the "Use focus map" option:



2 Focus maps for cellSens Well Navigator

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• The Experiment Manager also has the "Use focus map" option and to choose position groups:

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Experiment		<b>^</b>
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Experiment		
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Ignore Z coordinates		
Use focus map		
Position group:		
All Positions		•

*Note:* Well Navigator options are inactive (greyed out) while the Focus Map icon in the Stage Navigator is activated.