Issue #16389:

"Size" ignored if placed before fontproperties

Potential source of the bug:

This bug appears to be caused by the Artist.update() function, which handles the two properties "size" and "fontproperties" in different ways depending on their parameter order when passed into update(). It seems that when the update() is called, if "size" is listed before "fontproperties" in the call parameters, then size will get set first, followed by the creation of a FontProperties instance with non-given defaults. Herein lies the problem; a FontProperties instance comes with a default font "size" when then overwrites the size that was set. This also explains why "size" works as intended when placed after "fontproperties", as "size" is able to overwrite the default set by "fontproperties", since update() processes "size" after "fontproperties".

Impact on other parts of the system:

Implementing a fix to this bug should in no way affect other parts of the system because the fix should only prevent the overwriting of "size" caused by the default initialization of FontProperties.

Estimated time for completion

- Phase 2: 2 days
- Phase 3: 2 days
- Phase 4: < 1 day
- Phase 5: < 1 day