Sage 300 Web Screens SDK

Pagination Support in CVIEW

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1. Introduction

Prior to Sage 300 2018, there has not been any support for pagination in a CVIEW component. This support is crucial for performance when navigating to a specific page in a Web UI finder.

Therefore, the finder has had to retrieve and throw away all the records retrieved between the current page and the destination page. This has caused a significant performance overhead when running Sage 300 Web Screens against a large database.

This document introduces pagination support in a CVIEW component.

1. New BrowseWithOffset Method

Microsoft introduced support for pagination in SQL Server 2008.

To leverage this feature of SQL Server, the ***BrowseWithOffset*** CVIEW method has been created:

*VIEWCALL BrowseWithOffset (LPVOID lpView, LPSTR lpsExpression, LONG lOffset, BOOL bAscending);*

This new method allows the passing of the starting record number to fetch for a given filter.

1. How to Enable Pagination

To provide support for pagination in a CVIEW:

* Install the Sage 300 SDK (minimum version is 2018)
* Re-instantiate only the CVIEWs which will require pagination
* Add the following to the \*1.h file for the affected CVIEWs:

*#define DO\_PAGINATION 1 // turn on pagination support to improve web finder performance*

By default, pagination is turned off even after a CVIEW has been re-instantiated with the latest CVIEW template.

1. Finder Framework

With the release of Sage 300 2018, the Web Screen Finder Framework has been modified to leverage the ***BrowseWithOffset*** method.

If the underlying CVIEW doesn’t have support for pagination enabled, the Finder Framework will automatically revert to the ***Browse*** method. Thus ensuring backward compatibility with existing CVIEWs.

1. Invoking BrowseWithOffset in C-Sharp

***BrowseWithOffset*** may be called in C-Sharp.

If the underlying CVIEW does not have support for pagination enabled and the CVIEW is not opened as Read-only, an exception will be thrown.