



Application Certification

Cloud xRP Summit

Virtual Developer Conference

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Ongoing improvements in the ISV solution certification program



Refined requirement structure

4.4 The ISV solution must not affect the performance of Acumatica ERP

		Solution Category		
Type	Test Method	Embedded	Connected	Composite
Required	In-lab test	✓	✓	✓

Summary and Intent

This requirement is to eliminate poor design of the ISV solution that results in significant performance degradation of the Acumatica ERP environment.

Resources

For information about troubleshooting performance issues in the Acumatica ERP environment, refer to the [Acumatica Customization Guide](#).

How to Comply

Ensure that performance and overall responsiveness of standard Acumatica ERP screens and processes is not affected after the installation of your ISV solution. To pass this requirement, all ISV solution screens must comply with the performance benchmarks set for standard Acumatica ERP screens and processes.

Test Methodology

After installation of your ISV solution, the test engineer will import and restore the provided tenant snapshot with demonstration data. Then the test engineer will use the Performance Monitor Tool to check that performance of standard Acumatica ERP screens and processes is not affected and all ISV solution screens comply with the performance benchmarks set for standard Acumatica ERP screens and processes.

Criteria for Passing

This requirement is mandatory. If the solution causes performance degradation of the Acumatica ERP environment or contains screens, that do not comply with the performance benchmarks set for standard Acumatica ERP screens and processes, then it will fail the test.

ISV solution requirements and recommendations

0. Prerequisites
1. Development Requirements
2. User Assistance and Product Documentation Requirements and Recommendations
3. User Experience Requirements and Recommendations
4. Installation and Setup Requirements and Recommendations
5. Upgrade and Maintenance Requirements

ISV solutions certified on 2018 R2 to date

$$36 + 6 = 42$$

Categories of ISV solutions

- A **connected** solution is an ISV solution that communicates with Acumatica ERP application only through the Acumatica ERP web services API
- An **embedded** solution is an ISV solution that extends Acumatica ERP by using only the Acumatica xRP framework and the Acumatica Customization tools
- A **composite** solution is an ISV solution that combines traits from both embedded and connected solution

ISV Solution Certification Prerequisites

1. List of solution objects and integration scenarios:

- Site Map & Mobile Site Map nodes
- BLCs & BLC extensions + DACs & DAC extensions
- Custom Segmented Keys
- References to DACs from the standard Acumatica ERP application
- Integration scenarios performed by the solution via web services
- Complex ERP operations invoked or/and customized by the solution
- Push notifications + Import/Export scenarios
- Third-party assemblies + external services utilized or exposed by the solution

2. Proof of certification

Connected Solutions Testing

Connected solutions - step 1: Test instance deployment

powered by **aws**

NEW

Acumatica

Sales Demo

- Tenant A
- Tenant B
- Tenant C

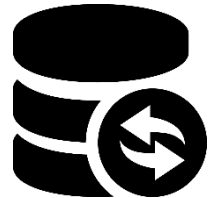


Connected solutions - step 2: ISV solution installation and configuration



Configure Acumatica ERP features

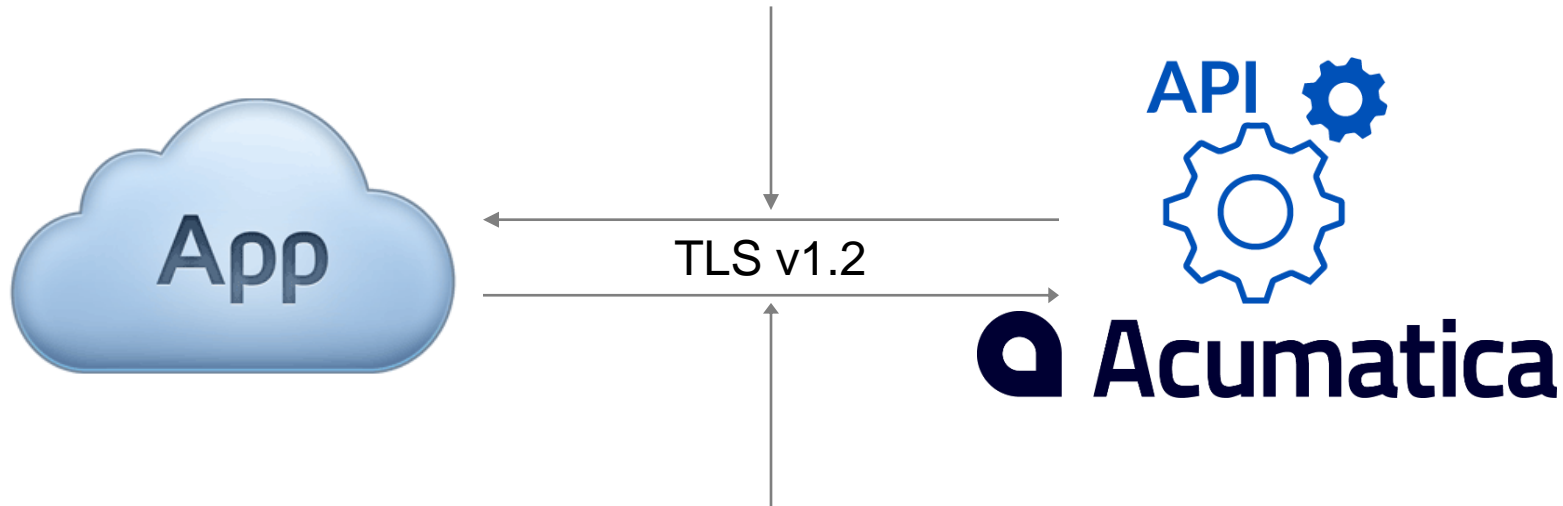
OR



Import and restore tenant snapshot with demo data

Connected solutions - step 3: Testing ISV solution in action

HTTP monitor to analyze the traffic



User-friendly messages reporting about errors

Connected solutions - step 4: Compliance with integration guidelines



Screen-based web services API:

ISV solution includes WSDL schemas of Acumatica ERP screens

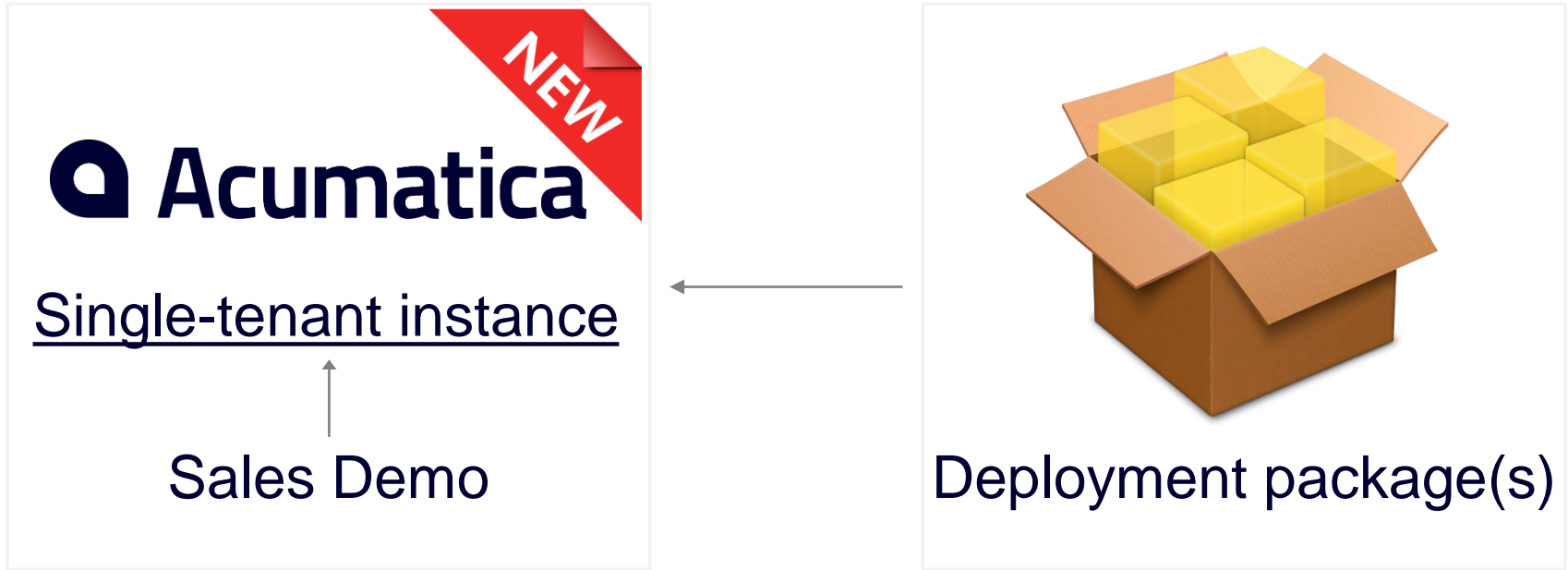


Contract-based web services API:

Endpoints used by ISV solution meet integration guidelines

Embedded Solutions Testing

Embedded solutions - step 1: Test instance deployment



Embedded solutions - step 2: Solution objects validation

The screenshot illustrates the process of validating solution objects in Acumatica. It features two overlapping windows. The background window, titled 'Customization Projects', contains a table with columns: Published, Project Name, Level, Screen Names, and Description. The 'SampleSolution' project is highlighted. A 'VALIDATIONS' dropdown menu is open, showing options: 'Validate Highlighted Project' (highlighted with a red box), 'Validate Multiple Projects', 'DAC Field Types (Runtime Validation)', 'DAC Attributes (Runtime Validation)', and 'Lookup Definitions (Runtime Validation)'. The foreground window, titled 'Customization Project Prefix', has a 'Project Prefix' field with the value 'SS' and a 'VALIDATE PROJECT ITEMS' button (highlighted with a red box). Below this, the 'VALIDATION RESULT' section displays the text: 'SampleSolution' followed by 'No errors or warnings have been found during validation. Validation has completed successfully.' at the bottom are 'SAVE', 'SAVE & CLOSE', and 'CANCEL' buttons.

Customization Projects ☆

PUBLISH UNPUBLISH ALL IMPORT EXPORT VIEW PUBLISHED VALIDATIONS

Published	*Project Name	Level	Screen Names	Description
<input type="checkbox"/>	SampleSolution			

Acumatica

File Publish Extension Library Source Control

- Manage Customization Projects
- Edit Project XML
- Edit Project Items
- Export Project Package
- Replace from Package
- Validate Project Prefix
- Export Project Items Workbook

Customized Screens

ADD SCREEN

Customization Project Prefix

Project Prefix: SS VALIDATE PROJECT ITEMS

VALIDATION RESULT

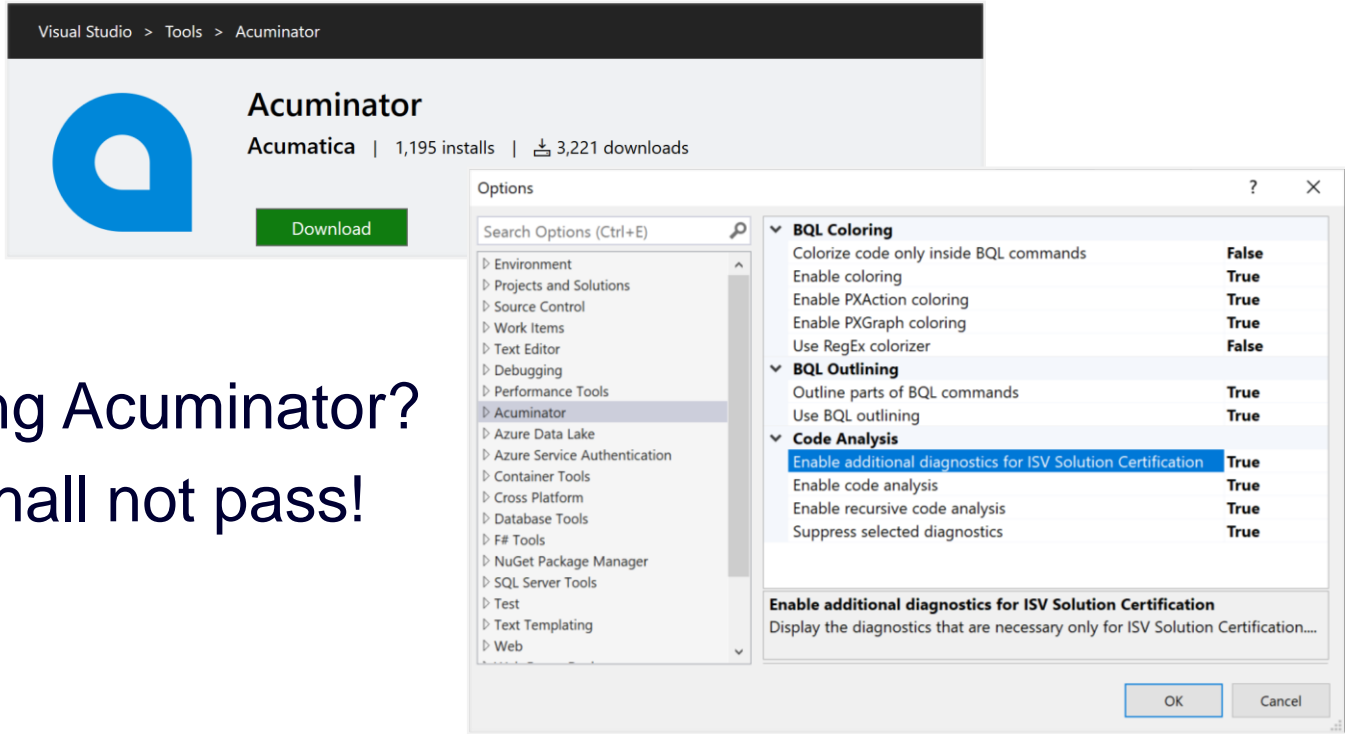
SampleSolution

No errors or warnings have been found during validation.
Validation has completed successfully.

SAVE SAVE & CLOSE CANCEL

Embedded solutions - step 3: Static code analysis tests

Not using Acuminator?
You shall not pass!



Connected solutions - step 4: ISV solution installation and configuration

1

Configure Acumatica ERP features

2

Publish ISV solution deployment package(s)

3

Set up ISV solution

Embedded solutions - step 5: Runtime validations

The screenshot displays the 'Customization Projects' window in Acumatica. The 'VALIDATIONS' dropdown menu is open, showing options: 'Validate Highlighted Project', 'Validate Multiple Projects', 'DAC Field Types (Runtime Validation)', 'DAC Attributes (Runtime Validation)', and 'Lookup Definitions (Runtime Validation)'. The 'DAC Field Types (Runtime Validation)' option is highlighted with a red box. Below the menu, a terminal window shows the execution of 'AcumaticaCertification.exe' with the following output:

```
C:\Users\rdevyatko\CodeRepository\Tests\Selenium\AcumaticaCertification\bin\Debug\AcumaticaCertification.exe
[09:43:13 INF] Using setting _customizationDirectory with value CustomizationLib
[09:43:14 INF] Using setting _sitePath with value C:\Users\rdevyatko\Customizations\078137
[09:43:14 INF] Using setting _username with value admin
[09:43:17 INF] Starting validation of the solution
[09:43:38 INF] Starting validation of Translation Requirement
Screen ExternalResource has been validated
Screen Default has been validated
Screen MobileAuth has been validated
Screen ProjectBrowser has been validated
Screen ReportLauncher has been validated
Screen RMLauncher has been validated
Screen AP101000 has been validated
Screen AP102000 has been validated
Screen AP102010 has been validated
Screen AP201000 has been validated
Screen AP202000 has been validated
Screen AP202010 has been validated
Screen AP203500 has been validated
Screen AP204000 has been validated
Screen AP205000 has been validated
Screen AP301000 has been validated
Screen AP302000 has been validated
Screen AP303000 has been validated
Screen AP303010 has been validated
Screen AP304000 has been validated
Screen AP305000 has been validated
Screen AP401000 has been validated
Screen AP402000 has been validated
Screen AP403000 has been validated
Screen AP404000 has been validated
```

Embedded solutions - step 6: User experience and Help documentation



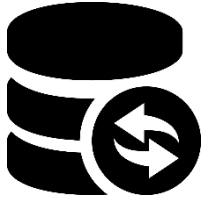
ISV solution complies with core UX guidelines

Modern & Classic UI



ISV solution includes Help that is targeted to the solution user

Connected solutions - step 7: Key functionality verification tests



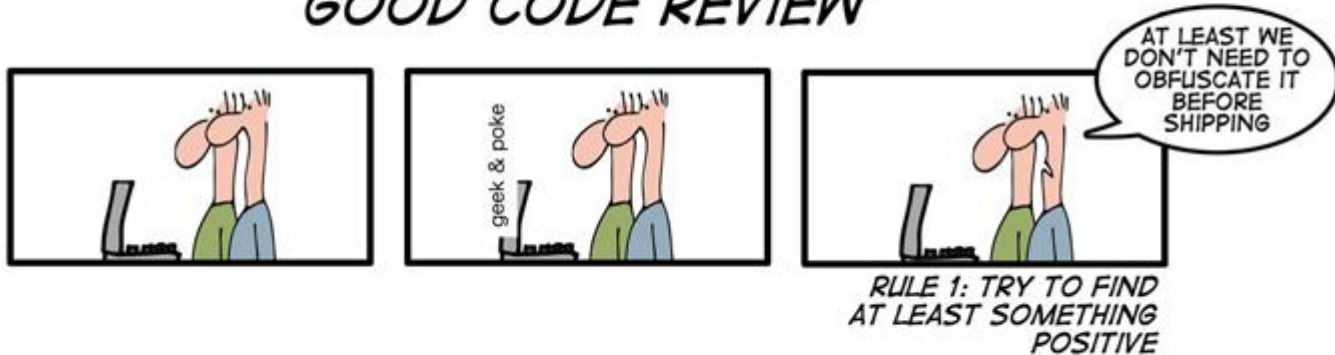
Import and restore tenant snapshot with demo data



Perform key functionality verification tests

Connected solutions - step 8: ISV solution code review

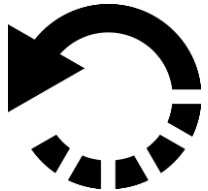
HOW TO MAKE A GOOD CODE REVIEW



Connected solutions - step 9: ISV solution uninstallation



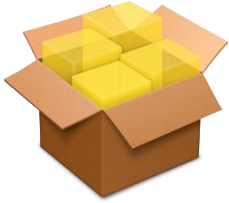
Unpublish ISV solution deployment package(s)



Follow the uninstallation procedure

Composite Solutions Testing

Composite Solutions



Local single-tenant Acumatica ERP instance:

Embedded solutions testing



Publicly available multi-tenant instance:

Connected solutions testing

Want to learn more?

Resellers

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- [Construction Program](#)
- [Education and Certification](#)
- [Partner Support Program](#)
- [Implementation Assist](#)

ISVs

- [Program Overview](#)
- [Education](#)
- [Developer Support](#)
- [Application Marketplace](#)
- [Manage ISV Solutions](#)
- [Solution Certification](#)

Acumatica ISV Solution Certification

Acumatica has developed a set of guidelines and requirements for partners building packaged solutions for Acumatica. These requirements are applicable for solutions using either the Acumatica framework, web-services, or a combination of both.

As a benefit for passing these requirements, your solution will earn the Acumatica Certified Logo which can be used in marketing material promoting the solution.

This certification is also a requirement for partners who want to be represented on the Acumatica price list.



Questions:

For technical questions, contact [Dmitry Naumov](#)

For business related question, contact [Christian Lindberg](#)

Certification Process and Guidance

2019 R1	Certification requirements for 2019 R1	Acumatica ISV Software Certification Guidelines and Appendices
2018 R2	Updated certification requirements for 2018 R2	Acumatica ISV Software Certification Guidelines and Appendices

No Reliance

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Thank You

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