



# Automated Management of an Acumatica ERP Instance

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# Agenda

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- ✓ Acumatica Deployment
- ✓ Building Customization package
- ✓ Publishing Customization
- ✓ Cleanup

```
ext.AddScreenConfigurationFor(screen =>
    screen
    StateIdentifierIs<status>()
    AddDefaultFlow(flow =>
        flow
        .WithFlowStates(fss =>
            {
                fss.Add(initialState, -flowState => -flowSt
                fss.Add<State.hold>(flowState => ...);
                fss.Add<State.open>(flowState => ...);
                fss.Add<State.confirmed>(flowState => ...);
                fss.Add<State.partiallyInvoiced>(flowStat
                fss.Add<State.invoiced>(flowState => ...);
                fss.Add<State.completed>(flowState => ...);
            })
        .WithTransitions(transitions =>
            {
                transitions.AddGroupFrom(initialState, -ts
                transitions.AddGroupFrom<State.hold>(ts =
                transitions.AddGroupFrom<State.open>(ts =
                {
                    ts.Add(t => t.To<State.hold>().IsTrig
                    ts.Add(t => t.To<State.confirmed>().I
                });
                transitions.AddGroupFrom<State.confirmed>
                {
                    ts.Add(t => t.To<State.open>().IsTrig
                    ts.Add(t => t.To<State.invoiced>().Is
                    ts.Add(t => t.To<State.partiallyInvoi
                });
                transitions.AddGroupFrom<State.partiallyI
                transitions.AddGroupFrom<State.invoiced>(
                transitions.AddGroupFrom<State.completed>
            )))
    ))
```

# Why Recycle and Not Reuse?

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- DB-schema remains changed
- Changes to once applied items are skipped
- Results of executing a customization plug-in remain in the database
- Managing storage space is difficult

Validation finished successfully.

Cleaning up the database

Updating the database

EntityEndpoint EntityEndpoint#20.100.0095\$CustomServicesEndpoint(skipped, already applied)

EntityEndpoint EntityEndpoint#20.200.001\$branch(skipped, already applied)

EntityEndpoint EntityEndpoint#test\$test(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AM-Disassembly(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AM-Engineering Change Order(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AM-Estimates(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AP-Bills and Adjustments(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AP-Vendors(skipped, already applied)

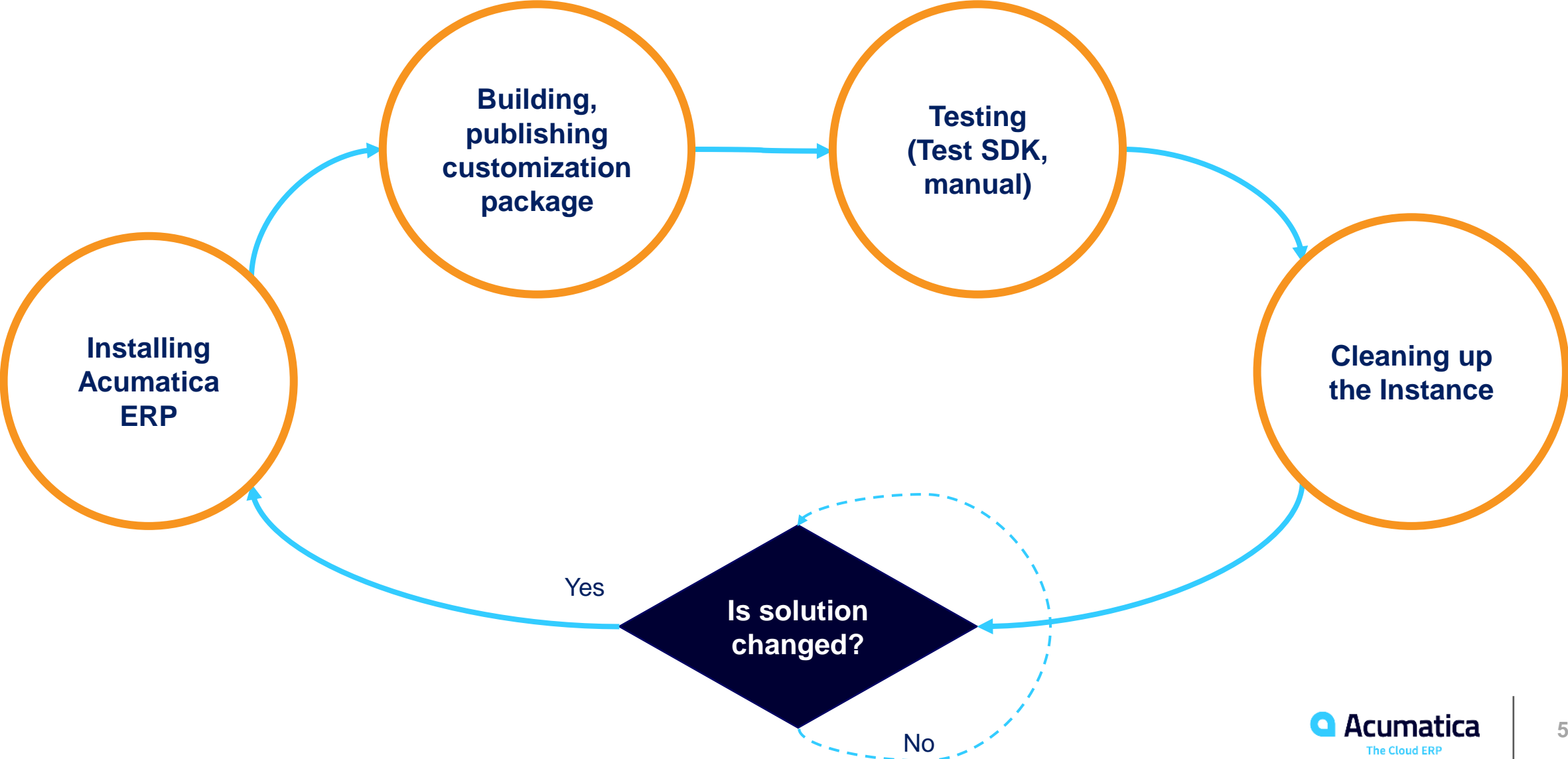
GenericInquiryScreen GenericInquiryScreen#AR-Customers(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AR-Invoices and Memos(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#AR-Payments and Applications(skipped, already applied)

GenericInquiryScreen GenericInquiryScreen#BE-ARinvoices(skipped, already applied)

# Suggested Instance Life Cycle



# Acumatica ERP Installation Steps

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1. Download the Installer
2. Unpack the MSI file
3. Install Acumatica ERP using the command line

```
msiexec /a drive:\filepath\to\MSI\file /qb TARGETDIR=drive:\filepath\to\target\folder
```

```
ac.exe -cm:"NewInstance" -s:"SM" -d:"InstanceDB" -c:"ci=1;" -c:"ci=2;cp=1;ct=Demo;cv=True;cn=Company;" -  
i:"Instance" -h:"C:\Acumatica\Instance" -w:"Default Web Site" -v:"Instance" -po:"Classic .NET AppPool" -  
a:"AnonymousUser"
```

# Building a Customization Package with PX.CommandLine.exe

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PX.CommandLine is a tool for building a customization package that is based on a customization project or that uses existing files.

## Prerequisites:

- Project items should be saved as files
- Acumatica ERP instance should be up and running

```
PX.CommandLine.exe /website "path_to_Acumatica_website" /method BuildProject  
/in "path_to_customization_source_control_folder"  
/include "path\to\additional\file1.ext" "relative\package\path\to\file2.ext"  
/out "full_name_of_customization_file.zip"
```

# Publishing a Customization Package

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- Specify Acumatica ERP Instance credentials
- Use ServiceGate SceneBased API:
  - UploadPackage(string packageName, byte[] packageContents, bool replaceIfPackageExists)
  - PublishPackages(string[] packageNames, bool mergeWithExistingPackages)
  - For multitenant:  
PublishPackagesEx(string[] packageNames, bool mergeWithExistingPackages, PublicationOptions options)  
*In PublicationOptions you can specify either AllCompanies boolean value or string array with Tenants*

## Notes

- *Customization plug-in should be in a code item and not compiled in the DLL*
- *In Acumatica ERP 2022 R2, Customization Web API (REST) has been introduced*

# Cleaning Up the Instance

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- Site files
- Virtual Directory
- Database
- TemporaryAspFiles
- Snapshots
- Customization items
- Registry
- AppPool (if created explicitly)



# Resources

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- Virtual DevConf 2022 specials
  - Acumatica Instance Manager on GitHub - <https://github.com/weihnachtswichtel/AcumaticaInstanceManager>
  - PX.CommandLine Example - <https://github.com/weihnachtswichtel/PXCommandLineExample>
  - ServiceGate Client - <https://gist.github.com/weihnachtswichtel/cfb1dc54e8a67a461d3cb793e364510a>
- Acumatica Help Articles
  - ac.exe - [https://help-2022r1.acumatica.com/\(W\(12\)\)/Help?ScreenId=ShowWiki&pageid=19bdc844-1acc-41e5-b08e-c52de0feee68](https://help-2022r1.acumatica.com/(W(12))/Help?ScreenId=ShowWiki&pageid=19bdc844-1acc-41e5-b08e-c52de0feee68)
  - PX.CommandLine.exe - [https://help-2022r1.acumatica.com/\(W\(11\)\)/Help?ScreenId=ShowWiki&pageid=0450cd3a-9c71-4ee3-a11c-46128f227d04](https://help-2022r1.acumatica.com/(W(11))/Help?ScreenId=ShowWiki&pageid=0450cd3a-9c71-4ee3-a11c-46128f227d04)
  - Service Gate - [https://help-2022r1.acumatica.com/\(W\(6\)\)/Help?ScreenId=ShowWiki&pageid=fb462e6f-7cbe-4bd0-b797-b329295298eb](https://help-2022r1.acumatica.com/(W(6))/Help?ScreenId=ShowWiki&pageid=fb462e6f-7cbe-4bd0-b797-b329295298eb)
- Other
  - Amazon S3 API - <https://docs.aws.amazon.com/AmazonS3/latest/API/Welcome.html>
  - msiexec.exe - <https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/msiexec>
  - Release notes for 2022 R2 with Web Customization API: [http://acumatica-builds.s3.amazonaws.com/builds/preview/22.2/ReleaseNotes/AcumaticaERP\\_2022R2\\_Preview1\\_ReleaseNotes\\_for\\_Developers.pdf](http://acumatica-builds.s3.amazonaws.com/builds/preview/22.2/ReleaseNotes/AcumaticaERP_2022R2_Preview1_ReleaseNotes_for_Developers.pdf)

A banner image for the Acumatica Virtual DevCon 2022. It features a hand pointing at a laptop screen with various code snippets overlaid in a futuristic, digital style. The background is dark with glowing blue and green bokeh lights and a grid pattern.

Acumatica  
**Virtual DevCon**  
2022

June 15-16

 **Acumatica**  
The Cloud ERP

**Thank You!**

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