

ActiveControl - Release Notes

9.00 — Last update: 4 September 2022

Basis Technologies

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1. Introduction

ActiveControl 9.00 was released in September 2022

Previous releases of ActiveControl, Transport Expresso and Transport Express are detailed in separate Release Notes:

- ActiveControl 8.50 (released September 2021)
- ActiveControl 8.40 (released January 2021)
- ActiveControl 8.3 (released June 2020)
- ActiveControl 8.2 (released November 2019)
- "ActiveControl 8.1" Minor Patch Fix Release for 8.0. (released August 2019)
- ActiveControl 8.0 (released May 2019)
- ActiveControl 7.2 (released June 2018)
- ActiveControl 7.1 (released April 2018)
- ActiveControl 7.0 (released August 2017)
- Transport Expresso 6.20 (released May 2016)
- Transport Expresso 6.10 (released June 2015)
- Transport Expresso 6.00 (released February 2015)
- Transport Express 5.30 (released September 2014)
- Transport Express 5.20 (released March 2014)
- Transport Express 5.1n (released 2013)
- Transport Express 5.00 (released 2012)

2. SAP Certification

ActiveControl is a SAP certified solution:

- Certified for deployment on SAP ERP 6.0 EhP8 via the SAP integration scenario ABAP Add-On Deployment for SAP Enterprise Resource Planning (SAP report 19583)
- Certified for deployment on SAP S/4HANA 2021 via the SAP integration scenario ABAP Add-On Deployment for SAP S/4HANA (SAP report 19584)
- SAP Solution Manager Ready functionality

All ActiveControl SAP components exist within Basis Technologies' own namespace /BTI/. Some other Basis Technologies' products that are used in conjunction with ActiveControl exist within seperate /BTR/ namespace.

3. ActiveControl (9.00)

3.1. Hybrid support of BTP change

Over the last 18 months or so, some of Basis Technologies' customers have started to look at SAP BTP (Business Technology Platform) [previously known as SCP (SAP Cloud Platform)].

As some of these customers have started to make changes within SAP BTP (eg to Cloud PI or SAP Fiori Launchpad), they have asked Basis Technologies if ActiveControl could be used to manage those changes in the same automated manner as other SAP ABAP and Java landscapes being managed via ActiveControl for many years. Although ActiveControl could already achieve this via CTS+, ActiveControl 9.00 introduces a new solution that can be used by customers to manage MTAR or ZIP changes via ActiveControl.

The scope and process of this solution is essentially as follows:

- 1. Developer does their changes in BTP.
- 2. Developer exports work to MTAR or ZIP (depending on the change being made).
- 3. Developer creates a non-transportable Transport Form within ActiveControl, and uploads the MTAR or ZIP file to it.
- 4. Developer links the Transport Form to a Business Task as per normal process within ActiveControl.
- 5. Transport Form follows the usual approvals workflow.
- 6. In an Import Queue, ActiveControl will automatically deploy the changes via Cloud Transport Management Service (cTMS).

The benefits of this solution are ultimately to allow Basis Technologies' customers to manage Hybrid landscapes involving both traditional and BTP cloud changes in a single, consistent fashion. These BTP changes will follow the usual ActiveControl workflow (with full auditability), and be automatically deployed via an ActiveControl Import Schedule (with any issues highlighted back to ActiveControl in the form of a System Error. Any dependencies across BTP and traditional ABAP stack systems can also be set, to ensure appropriate sequencing and central orchestration of the change in a Hybrid landscape.

Configuration Steps

Please contact Basis Technologies if you have upgraded to ActiveControl 9.00 and are interested in implementing this functionality. We strongly recommend this is done with some Basis Technologies' services so that we can best support you not just with the configuration that is required, but also to support any feedback you might have in order to improve and/or widen the scope of the current solution.

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3.2. Revised software packaging of **ActiveControl**

The deployment of ActiveControl software has historically required the same full 'Server' transport to be deployed in the Domain Controller plus all Satellite Systems (ie Dev, QA, Production etc) being managed via ActiveControl. The same has generally been true for Cumulative Patches – in that all CPs needed to be deployed to all Satellite Systems as well as the Domain Controller.

This has always resulted in a slightly painful experience for customers – and so on the back of customer feedback, ActiveControl 9.00 introduces a revised software packaging structure – which ultimately aims to reduce the size of the ActiveControl software transport that needs to be deployed to most of the satellite systems – and in many cases also avoid the need for Cumulative Patches to be deployed to non-Development satellite systems.

From ActiveControl 9.00 onwards – the software will be named (and deployed) as follows:

Transport Name	Where to Deploy	What does this transport contain
Full	Domain Controller + Development satellite systems	All of the ActiveControl objects.
Remote	Non-Development satellite systems	Smaller subset of objects relating to specific functionality needed in non-Development systems (eg Imports).



Depending on customer feedback, Basis Technologies may rationalise the software transport structure further in later releases of ActiveControl.

Please refer to this online Knowledge Article for important information relating to upgrades to existing implementations of ActiveControl.

3.3. Transportable Configuration

Over the years, many customers have requested that more of the ActiveControl configuration be transportable - to enable them to make changes to ActiveControl more consistent with how they make changes in standard SAP – and to help them avoid the need to manually redo configuration via the ActiveControl Windows GUI in Production Domain Controller after having tested the configuration in the Development Domain Controller.

Newer ActiveControl functionality such as the Rules Engine is already transportable – and many customers already utilise this to move Rules Engine configuration from their Development to Production Domain Controller after testing. ActiveControl 9.00 starts to introduce more transportable configuration within ActiveControl.

As part of ActiveControl 9.00 – it is now possible to optionally configure (and transport) the following configuration via SM30 instead of configuring via the Windows GUI.

- Types
- Groups

Configuration Steps.

It is possible to configure via either Windows GUI or the SAPGUI – it is not possible to configure the same entities of ActiveControl within both.

The default is Windows GUI. To switch to SAPGUI, the flag must be set via flag in table /BTI/ TE TBL FLAG in the Domain Controller (using SM30).

Please refer to this online Change Note for further details of the setup required for this optional capability of ActiveControl.



Further configuration areas will be offered as transportable configuration in later releases of ActiveControl. It is anticipated that User Roles will become transportable in the ActiveControl 9.10 release.

3.4. ActiveControl Web Platform (Pilot Customers only)

Over the past few years, Basis Technologies have gradually been moving more and more ActiveControl functionality previously only available in the Windows GUI over to the Web UI. Ultimately this has been done in response to a lot of customer feedback that they would prefer to only deploy the WebUI to their users.

In early 2021, Basis Technologies commenced a new Web Platform project that will replace both the Windows GUI and current Web UI.

The high-level objectives of this new Web Platform are as follows:

- 1. New, single UI5-based User Interface.
- 2. More modern / intuitive UX
- 3. Mobile Ready
- 4. Improved Performance in some aspects of the product (versus current WebUI and Windows GUI)
- 5. Feature Activation / Authorisations-driven UI (Only show functionality that is enabled by customer and/ or that user has authorisations to use)
- 6. Deliver 75+ new / optimized product features; many were requested by existing Customers over the years.
- 7. Introduce internal BTI automated testing to improve the stability of AC releases and cumulative patches

ActiveControl 9.00 includes the Phase 1 deliverables of the Web Platform – essentially all functionality available in the current WebUI.

From September 2022 – November 2022, this Web Platform will only be available to 4-5 Pilot customers. From November 2022, it is anticipated that the Web Platform will be generally available to all customers.

4. ShiftLeft (9.00)

4.1. New (0072) 'Transport Import Date Analysis' analyser

ActiveControl 9.00 introduces new ShiftLeft: Transport Import Date Analysis (0072).

This information analyser aims to provide Change & Release Managers with an indication of when Transports could be deployed into Production, based on the object contents and the usage of the top level objects (ie Transactions, Programs) to which those objects roll up.

The output of the Analyser will present three suggested time windows for deploying the Transport(s) in the following 7 day period, based on when the top level objects were not used in a previous time period (eg 30 days) as indicated by a production usage data retrieval program.

Ultimately, the aim of this Analyser is to help SAP Teams move to more Agile deployments – where transport deployments can be done more frequently based on actual usage of the top-level objects impacted by the objects in the transports to be deployed – and not just based on the more traditional time-window based deployment process (ie where it is not expected that Business users will be on the system).

It is possible to exclude Days or certain Time Windows from the Analyser via Parameters; this can be used by Administrators to exclude certain days of the week (or certain times of the day) where Deployments are never performed within the customer organisation. It is also possible to exclude certain objects from the report output.

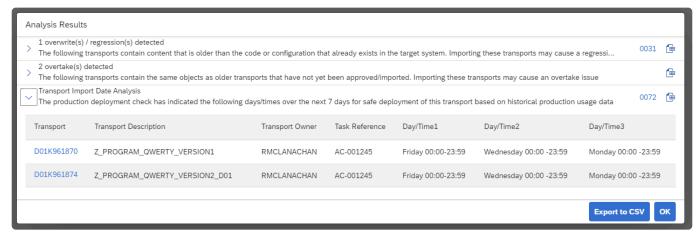


Figure: New ShiftLeft: Transport Import Data Analysis (0072) will recommend deployment windows based on previous usage.

Configuration Steps

More information on this new Analyser – and instructions on how to configure it – can be found in this online Knowledge Article. The original Change Notes for this new analyser can also be found here.

•

0072 can only be run in a Production Inbox. It is not designed to be run on Dev or QA Targets – its purpose is to determinate appropriate time windows to move to Production, based on Production usage data.

4.2. Exclude Objects from some ShiftLeft **Analysers**

Over the years, some existing Basis Technologies' customers have requested the ability to exclude certain objects from certain ShiftLeft analysers, namely:

· 0016 Dev Enforcer: Standards · 0006 Dev Enforcer: Performance 0004 Dev Enforcer: Security 0060 Deep Impact Analysis

ActiveControl 9.00 introduces a new backend configuration table /BTI/TE ANLEXC that can be used to exclude objects from the aforementioned analysers. Please note that this new table also replaces the previous table /BTI/TE_CONFL_EX that could be used historically to exclude objects from the following analysers:

- 0005 Conflict Analysis
- 0031 Overtake/Regression analysis
- 0035 Conflict Analysis

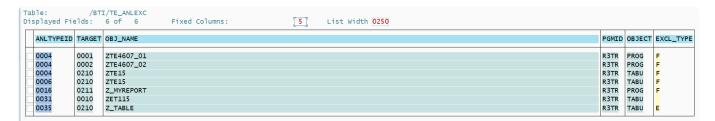


Figure: New backend table /BTI/TE_ANLEXC can be used to exclude certain objects from certain analysers / targets

Configuration Steps

1. Configure table /BTI/TE_ANLEXC in the Domain Controller based on your requirements to exclude objects from 0004, 0006, 0016, 0031, 0035 or 0060 analysers. When adding new entries, the Analysis should be selected first, using the matchcode, so all the possible exclusion values for it are correctly displayed.



Please refer to these Knowledge Articles for screenshot examples of how to exclude specific objects from Deep Impact Analysis and Conflict Analysis

As part of upgrading to ActiveControl 9.00 (or later), customers using pre-existing /BTI/

TE_CONFL_EX table to exclude objects from 0031 or 0035 should manually migrate configuration over to the new /BTI/TE_ANLEXC table. Table /BTI/TE_CONFL_EX will be removed from the ActiveControl product in a later release.

4.3. Enhanced (0060) Deep Impact Analysis – Decoupled analysis

Historically, ActiveControl ShiftLeft Analysers have always run at the time of approval, import and test queue signoff. In most instances, the analysers take a few seconds to run and do not slow down the process noticeably. However in the case of more performance-intensive analysers such as 0060 Deep Impact Analysis, the run-time of the analyser can sometimes be several minutes or longer, depending on the contents of the transports being analysed.

On the back of customer feedback, ActiveControl 9.00 introduces a new capability to decouple the Analysis runtime – or more specifically – to run the Analyser when the transport lands in the control point and cache the results and present those to the user at actual runtime of the Approval, Test signoff or Import. This new decoupling framework is being introduced for 0060 Deep Impact Analysis initially – and may be extended out to other Analysers in later releases of ActiveControl.

Configuration Steps

- 1. Setup Deep Impact Analysis as per the steps detailed in this Knowledge Article.
- 2. Update table /BTI/TE_ANLTYPE in the Domain Controller for 0060, with [CLASSNAME] field populated with '/BTI/TE_CL_ANALYSIS_DI_ADC' and the [FUNCNAME] field blank.

Please refer to this Change Note for further information / screenshots of this change.

4.4. Enhanced (0055) Changes to Same Objects (Path) – Siblings

ShiftLeft: Changes to Same Object (Path) [0055] has been a popular analyser for customers since its introduction a few years ago – particularly as a means of informing Transport Owners back in the Development system if there are other inflight transports, that contain the same objects, sitting further forward in the landscape.

Several customers requested that the existing analyser be enhanced to better cater for the 1:Many scenario where one Development system feeds multiple Test systems – as historically it was not picking up all the TR's in all of the sibling (ie parallel) targets backwards / forwards in the path. ActiveControl 9.00 has therefore enhanced the existing 0055 Analyser to cater for this scenario and more accurately report any results.

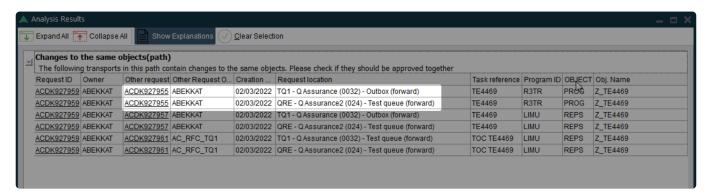


Figure: Example of 0055 analyser highlighting a transport containing same objects, sitting in parallel targets.

Configuration Steps

None.

4.5. Enhanced (0009) Check Releasibility – Smartform objects

(0009) Check Releasibility analyser is a useful way to warn ActiveControl users and approvers if a TR has releasibility issues that will prevent it being automatically released by ActiveControl.

Over the past year, a couple of customers raised that the existing 0009 Shiftleft analyser did not warn about inactive Smartform objects, and as a result of this gap, transports including such changes were sometimes landing unreleased in the Import Queue and causing import issues.

To address this, ActiveControl 9.00 includes an enhancement to the existing (0009) Check Releasibility analyser to incorporate a check for inactive SSFO objects.



Figure: 0009 Analyser now indentifies releasibility issues relating to Smartform object type.

Configuration Steps

There is no additional configuration required for this additional capability as part of the existing 0009 analyser.

5. Reports (9.00)

5.1. New 'Build List Report Across Paths'

The ActiveControl Build List Report has been around for almost a decade, offering customers an automated way of creating a sequenced Build List of an upcoming Project or large SAP change that contains all Transports and non-Transportable items (ie Manual Steps, Manual Activities) relating to that particular deployment.

Over the years, several Basis Technologies' customers have requested to be able to run the Build List Report across multiple paths to be able to see a sequenced list of transports (and non-transportable changes) across multiple SAP applications. ActiveControl 9.0 introduces this capability in the form of a new Build List Report across Paths.

The Build List Report across Paths can be run via report /BTI/TE_RBUILD_LIST_NEW in the Domain Controller (or via transaction /n/BTI/TE_RBUILDL_NEW)

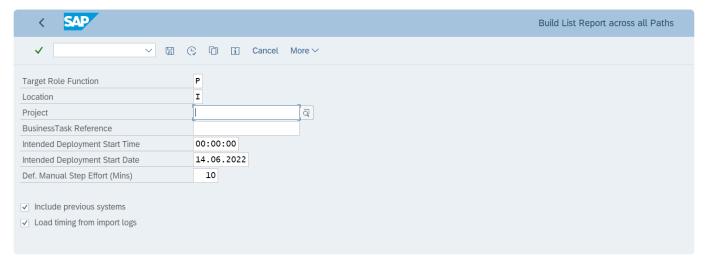


Figure: New Build List Report across Paths - Selection Screen



It is a mandatory pre-requisite to either enter a Project or a Business Task in the selection screen. This is by design, for performance reasons.

Configuration Steps

1. It is a mandatory pre-requisite to map all your Target Roles to Functions. This is done via [Target Roles] section of the ActiveControl configuration screens.

6. Other Enhancements (9.00)

6.1. Copy Custom Fields as part of TOC process

Around 25% of ActiveControl customers use Transport of Copies as part of their testing processes. These customers leave the original SAP Transport as unreleased, and move a Transport of Copies (TOC) containing the changes into the Test system to perform testing, and only release the original SAP Transport (and delete the TOCs) when testing is successfully completed. The key benefit of doing this is that it results in less transports moving through to subsequent SAP systems, because any issues found during testing can be fixed against the original unreleased SAP Transport (and then retested via another TOC)

ActiveControl has offered automation around such a Transport of Copies process for many years. This was enhanced significantly as part of ActiveControl 8.40 release (via new /BTI/TE_VAUTOCON configuration table) to provide more flexibility around the capability. This said, there was always a gap in the solution whereby any custom field values on the Transport Form of the original SAP Transport were not copied across to the Transport Form of the TOC, and some customers reported that this could impact their workflow process, and also have audit considerations later.

On the back of customer feedback, ActiveControl 9.00 introduces a new configuration option that allows TOC Transport Forms to inherit the custom field values on the Transport Form of the original Transport Form.



Figure: New configuration opton to copy Custom Fields as part of TOC creation process

Configuration Steps

1. Enable COPY_CUSTFS option within the existing /BTI/TE_TOCONFIG configuration table in the Domain Controller.

It is only possible to copy Custom Field values via this new COPY_CUSTFS option in a TOC process done at Transport Form level – ie where the source is one single Transport Form. It is not possible to use this capability when you multi-select Transport Forms to create a single TOC, or for customers that create Production TOCs that combine changes in lots of Transports into a single TOC.

6.2. New Document Categories (Projects + **Manual Steps**)

Project-level document categories

Some customers have requested over the years to be able to upload/link Attachments at AC Project level (eg to link to Project Plan, Project Charter type documentation). Historically this was only possible via a limited Windows GUI capability – and was not available in the WebUI at all. ActiveControl 9.00 introduces this new capability - however it can only be used in the new Web Platform, not in the legacy WebUI or Windows GUI. As part of this, new document category class for ActiveControl Projects has also been added – so that customers can define the various types of Project level documentation that they might want to add.

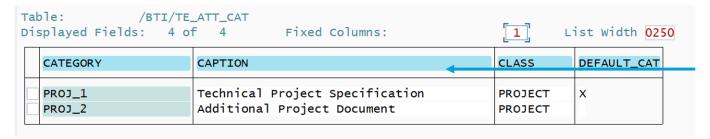


Figure: New project-level Documentation Category

Configuration Steps

Project-level Document Categories are configured in the usual way via /BTI/TE_ATT_CAT table. Please refer to this online Knowledge Article for further information.



The pre-existing ShiftLeft: Check Documentation (0051) analyser can NOT be used to check for document attachments at Project level. If this is something that customers are interested in, please raise a support ticket to highlight this.

Manual Step-level document categories

As part of the Web Platform, a new document category for Manual Steps has also been added.

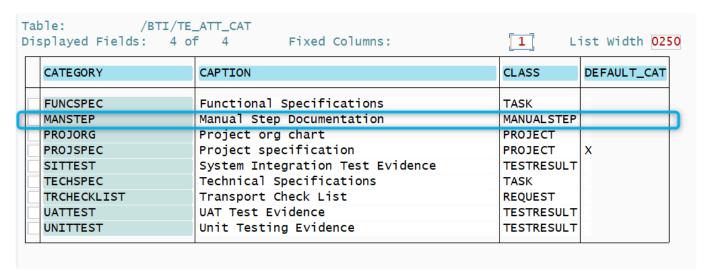


Figure: New Manual Step level documentation category

Configuration Steps

Manual Step level Document Categories are configured in the usual way via /BTI/TE_ATT_CAT table. Please refer to this online Knowledge Article for general instructions on Document Categories.

6.3. New Custom Email Notification – Consolidated Import email

ActiveControl 9.00 introduces a new custom notification that can be used to trigger a consolidated email containing the details of Business Tasks and Transport Forms that have been imported to a (configurable) target.

This new custom notification is added to address the recurring request from customers to be able to email out a single email of the changes that have been deployed into Production.

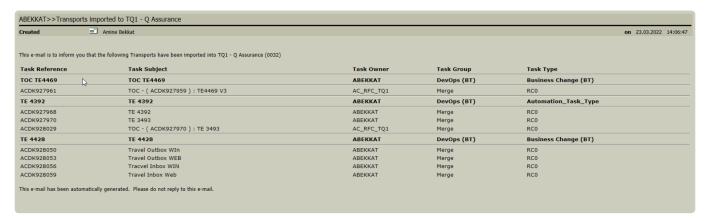


Figure: New Customer Email notification that consolidates a recent deployment import into a single email.

Configuration Steps

This new Custom Notification is configured via the standard ActiveControl /BTI/TE_NOTIF_CU and /BTI/TE_NOTIF_RE tables.

Please refer to this online Knowledge Article for further information.

6.4. Enhanced /BTI/ TE_EXIT_AUTOADDTFTYP_0610

ActiveControl 8.40 (February 2021 release) introduced a new capability to automatically populate the Transport Form [Type] field based on the SAP-level type of the transport (ie Customizing, Workbench, Transport of Copies).

This was made possible via a new /BTI/TE_EXIT_AUTOADDTFTYP_0610 user exit, and is detailed in this Change Note.

Following ActiveControl 8.40, some customers raised issue that it was not possible to use /BTI/ TE_EXIT_AUTOADDTFTYP_0610 to auto-populate the Type, but still use the global 'Prepopulate Type, Group, Path in new transport forms from last used value' configuration to automatically populate the Group and Path fields on the Transport Form.

As such, ActiveControl 9.00 introduces an enhanced version of the User Exit so both can be used in parallel. The table below summarises the various combination options and the expected outcomes:

/BTI/ TE_EXIT_AUTOADDTFTYP_0610	Prepopulate Type, Group, Path in new transport forms from last used value	Other 0610 User Exit also switched on	Expected Outcome
On	Off	Off	TF Type will be populated based on SAP transport type. TF Group and Path will be blank.
On	On	Off	TF Type will be populated based on SAP transport type. TF Group and Path will be populated based on previous value.
On	On	On	TF Type will be populated based on SAP transport type. TF Group and Path will be populated based on previous value. Other 0610 User Exit will also run, but populating the TF Type should not form part of that User Exit.
Off	On	Off	TF Type, Group and Path will be populated based on previous value.
Off	Off	On	Whatever is coded in custom user exit will take effect.
On	Off	On	TF Type will be populated based on SAP

	transport type. Other 0610 User Exit will also run, but populating the TF Type should
	not form part of that other 0610 User Exit.

Configuration Steps.

No new configuration steps are required.

- /BTI/TE_EXIT_AUTOADDTFTYP_0610 is switched on in the usual way via table /BTI/TE_EXITC in the Domain Controller.
- 'Prepopulate Type, Group, Path in new transport forms from last used value' option is switched on via the Global option in the [Other] tab in the Windows GUI configuration screens.

More information on this enhancement can be found in the online Change Note.

6.5. New Authorisations for releasing SAP Tasks

Prior to ActiveControl 9.00, it has always been possible to control who can release SAP Transports from within ActiveControl using the RELEASE and RELEASEOTHERS authorisation activities.

Some customers requested that a similar capability existed at an SAP Task level – particularly amongst customers that choose to create Transports and SAP Tasks via ActiveControl instead of in the SAPGUI. As such, ActiveControl introduces new authorisation activites within Y_TEFORM to control the releasing of SAP Tasks

RELEASETRTASK: allows a user to release only their own SAP Tasks

RELEASETRTASKOTHERS: allows a user to release SAP Tasks assigned to other users

Configuration Steps

No specific configuration is required for customers using the out-of-the-box ActiveControl single or composite roles. These new authorisation activities have been added to the relevant single roles and will be assigned via the usual SAP role assignment process in the Domain Controller. Please refer to the latest Security Roles Matrix for details of the ActiveControl out-of-the-box roles that include these new authorisation activities.

7. Integration (9.00)

7.1. Enhanced JIRA Integration

The ActiveControl / JIRA integration remains one of the most popular Basis Technologies integrations since it was introduced in 2017.

Two more enhancements have been added to the core integration as part of ActiveControl 9.00, both on the back of customer requests:

- Update Jira fields based on Task update
- · Clickable URL link to JIRA ticket

7.1.1. Clickable URL link to JIRA ticket

During 2021, a customer requested for the capability to automatically add a clickable URL link on the Business Task created as part of the integration, via which the user could quickly open up the corresponding JIRA ticket. ActiveControl 9.00 introduces this optional capability via a new User Exit and associated configuration. If enabled, a URL attachment will be created automatically during the Business Task creation as part of the integration, linking back to the URL of the corresponding Business Ticket.

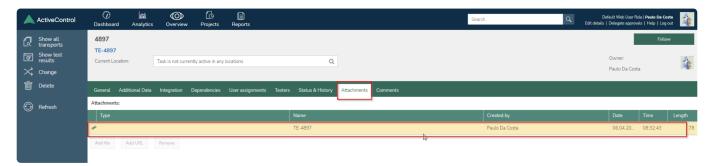


Figure: Automatically created URL attachment on the Business Task takes user to the JIRA ticket (if they have access)

Configuration Steps

The configuration steps for this new capablity – which includes a new TVARV parameter and document category, coupled with a new /BTI/TE_EXIT_JIRAURLONBT_0040 standard user exit – can be found in this online Change Note.

7.2. API Authorisations

ActiveControl includes APIs that are used by Basis Technologies' out-of-the-box SAP-based integrations – and also increasingly by customers using other middleware to integrate ActiveControl with other 3rd Party products.

One of those customers highlighted some of the APIs could be used without authorisations – so these have now been updated so that the detailed authorisation activity is now required by the user making the call.

API Activity	Low level API	Authorisation Activity now required
Business Task creation	/BTI/TE_TASK_CRT	Y_TE_TASK with activity 'CREATE' is required
Business Task change	/BTI/TE_TASK_CHANGE	Y_TE_TASK with activity 'CHANGE' is required
Business Task approval		Y_TEUSER with activity 'APPROVEALL' is required

Configuration Steps

No specific configuration is required for this. If using these APIs, then an integration user with the appropriate authorisations will be required.

7.3. Customer Integrations

Integrating ActiveControl with other 3rd Party tools has grown significantly in popularity at Basis Technologies over the last couple of years, as SAP customers strive to use best of breed tools as part of their end-to-end toolchain.

Since ActiveControl 8.50 – several customers have chosen to setup ActiveControl integrations with various 3rd Party tools themselves. These Integrations has been developed by the Customer – and are not part of ActiveControl out-of-the-box product. These integrations are mentioned in these Release Notes so that if any other customer is interested in such an Integration, you can contact Basis Technologies and we can facilitate some discussion/collaboration between you and the other Customer that did the work.

4ME

During 2021, a new Basis Technologies' customer requested an integration between ActiveControl and the 4ME (https://www.4me.com/) ticketing tool they were using. This was not a tool Basis Technologies had previously created an integration with. Since the customer wanted a particularly custom solution, they ended up doing the Development themselves – and so there is no new out-of-the-box Integration capability available as part of ActiveControl 9.00. The integration was solely to automatically create the Business Tasks. It was not a bi-directional integration to update 4ME ticket statuses as the Business Task deployment status changed as Transport Forms move through the ActiveControl workflow.

Microsoft Azure DevOps

During early 2022, a new Basis Technologies customer requested an integration between ActiveControl and Microsoft Azure DevOps (ADO). This was not a tool Basis Technologies had previously created an integration with. Since the customer did not want to use Node-RED – they instead chose to use Mulesoft to provide the middleware between ADO and the ActiveControl APIs. This integration was used to create Business Tasks at the appropriate point of the ADO ticket – and then send status updates back to ADO as the Business Task deployment status changed as the associated Transport Forms moved through the ActiveControl workflow.

8. Cybersecurity / Penetration Testing

As part of ongoing Basis Technologies' internal 'Continuous Improvement' initiatives aiming at improving our products and services that we offer our customers – some proactive work has been done within ActiveControl during 2021 and early 2022 to analyse the security and performance of the existing ActiveControl Web UI using various SAP-standard and also other industry-leading tools and techniques.

As a result of this work by the Basis Technologies' DevOps team, some optimisations have been delivered as part of ActiveControl 9.00 to further improve the security and performance of the product for our customers.

9. ISO 13485:2016 / FDA Audit

During 2022, one of Basis Technologies' existing customers requested their external auditors perform an audit of ActiveControl and Basis Technologies' DevOps (Development, Quality Assurance, Support)

Team processes in line with the requirements of ISO 13485:2016.

This particular customer operates within the life science / medical device industry. ISO 13485:2016 specifies requirements for a quality management system where an organization needs to demonstrate its ability to provide medical devices and related services that consistently meet customer and applicable regulatory requirements.

The feedback from this external Audit was extremely positive. Only two minor items were highlighted, which the customer's Auditors said was extremely praiseworthy for a company of Basis Technologies size. For the two minor items (both of which were internal procedural in nature, and not related to the ActiveControl product itself), Basis Technologies are already putting in place the necessary action plan to mitigate.

10. Bug Fixes (9.00)

10.1. 'Cumulative Patching' support process

Since January 2020, Basis Technologies' support team has introduced a new Cumulative Patching process for delivering patch fixes to customers.

This means that when a new bug is fixed for a customer after the release of ActiveControl 8.50, an interim patch release (eg AC 8.50.1) is created by Basis Technologies. If a second fix is then required for a second customer, then a new interim patch release AC8.50.2 is created that includes this second fix plus also the fix for the first customer contained within AC8.50.1.

This means that a customer requiring a fix will always be given a cumulative patch fix containing all fixes delivered by Basis Technologies for their version since the last main Release of ActiveControl.

This new Patching process has been introduced as Basis Technologies were increasingly encountering instances of different customers (both new customers plus existing customers that had upgraded to the latest Release) reporting the same bug issues. By introducing this interim Patching process, we believe it will largely avoid this inefficiency – and even more importantly, mean that Basis Technologies will in many cases already have an available fix that can be quickly provided to the Customer.

As part of this new Cumulative Patching Process, Change Notes will be created by Basis Technologies for every appropriate Change created by ActiveControl. We are hoping this will improve the visibility of changes being done to ActiveControl within our customer-base that has previously been possible within our long-standing Release Notes process.

Interim Patch Releases – and associated Changes Notes are available via our online Knowledge Base

10.2. Bug Fixes since AC8.50

Various bug fixes to previous releases are included in this latest ActiveControl 9.00 release.

A list of these fixes can be found in the 8.50 Cumulative Patch release notes via the Basis Technologies Support Portal; this list essentially details all of the fixes added since ActiveControl 8.50 – and by extension – are included in ActiveControl 9.00

11. Upgrading to ActiveControl 9.00

Basis Technologies do not backport Enhancements to earlier versions of ActiveControl, due to the effort and technical complexity involved.

Please refer to this <u>online Knowledge Article</u> for details of the key considerations and steps involved in performing an upgrade of ActiveControl.

If you are interested in upgrading to ActiveControl 9.00, please contact your Account Manager to discuss next steps. Basis Technologies would generally recommend that an ActiveControl upgrade is performed with some sort of formalised assistance from one of our Solution Specialists. This not only ensures that the benefits of the newer functionality can be more effectively reaped, it also helps ensure that any teething issues and questions encountered during the Upgrade process can be addressed in a timely manner.

Some more information on the typical Engagement options are detailed in this online Knowledge Article.

Important Notes about upgrading to ActiveControl 9.00

- (1) Please note that Transport of Copies functionality was changed significantly as part of ActiveControl 8.40 release. Customers using ActiveControl 'Transport of Copies' functionalities in a pre-8.40 release will need to migrate over to the Enhanced Transport of Copies configuration as part of an ActiveControl 9.00 upgrade. Some of the user exit solutions provided over the years have been replaced by the new functionality in this release, and will no longer work.
- (2) A new report was introduced in ActiveControl 8.40, to improve performance of the Overtake/
 Regression and Conflict analysis checks by migrating over Ignore flags from SAP transport parameter in
 E070 to a local Basis Technologies table. More information can be found in this <u>online Change Note</u>.
 Customers upgrading from a pre-8.40 release should migrate over their Ignore flags as part of their
 Upgrade.
- (3) ActiveControl has historically included a 'Task Planning' capability that can be used to manage pre-Development approval workflows. Task Planning has been considered legacy functionality within the product since January 2019. Asides from the fact that less than 2% of our customers are using this Planning functionality due to other best-of-breed ITSM tools such as JIRA and ServiceNow, Basis Technologies have not enhanced this area of the product for almost a decade. In ActiveControl 8.0, the functionality was hidden by default as it was no longer supported by Basis Technologies, the plan is to remove it completely from the product in the future, and as such, it should no longer be used by new and existing customers.