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### **1. Introduction**

ActiveControl 8.40 was released in January 2021.

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

- <u>ActiveControl 8.3</u> (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)
- <u>ActiveControl 7.2</u> (released June 2018)
- ActiveControl 7.1 (released April 2018)
- <u>ActiveControl 7.0</u> (released August 2017)
- <u>Transport Expresso 6.20</u> (released May 2016)
- Transport Expresso 6.10 (released June 2015)
- <u>Transport Expresso 6.00</u> (released February 2015)
- <u>Transport Express 5.30</u> (released September 2014)
- <u>Transport Express 5.20</u> (released March 2014)
- <u>Transport Express 5.1n</u> (released 2013)
- Transport Express 5.00 (released 2012)

### 2. SAP Certification

ActiveControl is a SAP certified solution:

- Certified for deployment on SAP NetWeaver 7.50 via the SAP integration scenario ABAP Add-On Deployment for SAP NetWeaver (SAP report 12648)
- Certified for deployment on SAP S/4HANA 1809 via the SAP integration scenario ABAP Add-On Deployment for SAP S/4HANA (SAP report 12658)
- 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. Enhanced Web UI

Basis Technologies continue to enhance the Web UI to introduce functionality that was previously only available via the Windows GUI. On the back of feedback from existing customers that prefer to minimise the deployment of the Windows GUI to their user community, ActiveControl 8.40 introduces the following new features in the WebUI to improve both functional capability and performance:

Mark as Manually Applied Path Filtering Exclusion of Inactive Projects WebUI Metric Caching

### 3.1. Mark as Manually Applied in the Web UI

'Mark as Manually Applied' is used as part of the Merge process, to reflect that a transport ready for Merging has been manually rekeyed in the Target development track, and therefore does not need to be Merged automatically via ActiveControl. This can be done in the Inbox or Import Queue of a Merge target.

Prior to ActiveControl 8.40, it was only possible to perform a 'Mark as Manually Applied' in the Windows GUI, via either the Actions dropdown, or alternatively by right-mouse clicking on a Transport (in a Merge target Inbox or Import Queue). Some customers provided feedback to Basis Technologies that this was restrictive, as they wanted their Development/Functional Teams to be responsible for the Merge process, but did not want to roll out the Windows GUI to them. As such, it is now possible to perform the Mark as Manually Applied within the Web UI. This should help customers wanting to de-centralize the responsibility for managing Merge in a dual-track scenario, and also for the increasing number of Basis Technologies customers using ActiveControl Merge as part of their S/4 transformation.

	ActiveControl	(j) Dashboar	ள் rd Analytics	Overview	Projects	E Reports	28163		Q		ult Web User Role   <b>Mcl</b>   Delegate approvals		
Q	Show transport form	<b>S</b>	Request Id	Description			Location	Owner	Group	Туре	Release Date/Time	# Obje / #	Conflict / SCI / Risk
	Create transport request										Date/Time	/# Keys	Status
æ	Create transport form		D01K928163	CH0123012 - A	ccruals fixes		S/4 Production Support Path: S/4 Project Dev System MERGE - Inbox	RMCLANAC	ABAP	Workben		0/0	
	Show transport properties												
Ŵ	Delete transport												
6	Lock												
6	Unlock												
<b>(+</b>	Create transport of copies												
0	Add to import queue												
0	Add to control point												
Ĵ,	Forward transport												
Ł	Mark as Manually Applied	-											
0	Refresh												

Figure: Mark as Manually Applied in the WebUI.

#### **Configuration Steps**

No additional configuration is required to switch on 'Mark as Manually Applied' capability in the WebUI; authorised users (ie those with the MARKASMANUALLYAPPLIE authorisation activity) will immediately be able to perform this action in the WebUI. Please note that this authorisation activity is only available in the out-of-the-box ActiveControl Basis role [/BTI/TE:STD\_BASIS\_AUTHS] – therefore customers will probably want to create a seperate Z role if they want Developers/Functional teams to also be able to perform the action.

More information on this Enhancement can be found in this online Change Note

### 3.2. Path Filtering in the WebUI

ActiveControl 8.40 introduces path filtering in the WebUI, to allows users to tailor what they see onscreen.

Path filtering is possible on both the main Dashboard screen of the WebUI, and also the Overview and Project screens.

	Image: Constraint of the second sec	Search Q Default Web User Role   McLanachan Ross Edit details   Delegate approvals   Help   Log out
Create business task	Overview Proje	iects News / My recent activity / Following
Create transport form	Path(s): BW - BAU * Vodate	e Selected   KcLanachan Ross approved_CRQ0023923 into QA System (T03) Work Schedule Rule for US office
My approvals	radily. BW-BRO & Opdate None	A system (105) Work Schedule Rule to 05 mile More than 3 months ago
My testing	Awaiting my approval 39	
Changes for my	Awaiting my testing 5	
Changes	In progress changes for my transports 797	
assigned to my role	In progress changes assigned to my role 1	
≝≓ My incomplete □ = manual items	My incomplete manual items 0	
Changes for my	In progress changes for my team 0	
r ⊟ New business E tasks	New business tasks 3046	
G Refresh		

Figure: Filtering in the Dashboard screen

ActiveControl	Image: Constraint of the second state of the seco	Search Q Default Web User Role   McLanachan Ross Edit details   Delegate approvals   Help   Log out
Create business task	Project: All The Filter by: None	Vews / My recent activity / Following
Create transport form	Path(s): BW - BAU 🗙	KUpdate     McLanachan Ross approved_CRQ0023923 into QA     System (T03) Work Schedule Rule for US office
My approvals		39
My testing	Awaiting my approval	39
Changes for my	Awaiting my testing	5
Changes assigned to my role	In progress changes for my transports	797
₩ My incomplete manual items	In progress changes assigned to my role	1
≝≓ Changes for my ≝≓ team	My incomplete manual items	0
₩	In progress changes for my team	0
🕞 Refresh	New business tasks	3046

ActiveControl	Image: Constraint of the second state of the seco		Jser Role   McLanachan Ross te approvals   Help   Log out
Create business task	Project: All The Filter by: None	✓ News / My recent activity / For	lowing
Greate transport	Path(s): BW - BAU w	KUpdate     Update     System (T03) Work Schedule R	
My approvals		39	More than 3 months ago
My testing	Awaiting my approval	39	
Changes for my	Awaiting my testing	5	
Changes assigned to my role	In progress changes for my transports	797	
방문 My incomplete 비문 manual items	In progress changes assigned to my role	1	
딸― Changes for my 티― team	My incomplete manual items	0	
r≓≕ New business = tasks	In progress changes for my team	0	
Refresh	New business tasks	3046	

Figure: Filtering in the Overview screen

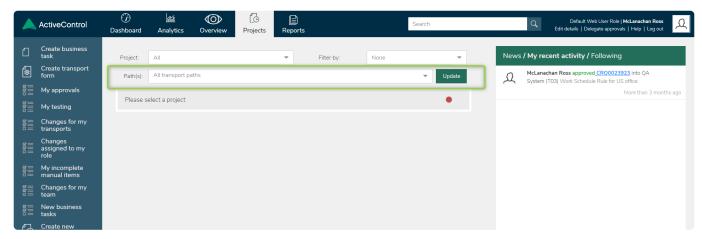


Figure: Filtering in the Project screen

### **Configuration Steps**

No additional configuration is required to enable path filtering in the WebUI.

### **3.3. Exclude Inactive Projects**

Some ActiveControl customers – particularly those larger enterprise SAP customers – or indeed smaller customers that have been using ActiveControl for a number of years – often have a lot of ActiveControl Projects that build up over time, most of which are finished and set to Inactive within ActiveControl.

On the back of customer requests during 2020, a capability has been added as part of ActiveControl 8.40 to enable customers to filter out inactive projects from the WebUI loading. Basis Technologies anticipate that this will have a marked performance improvement at customers that do have a lot of inactive Projects within the system.

#### **Configuration Steps**

Excluding inactive projects is done using new 'EXCLUDE\_INACTIVE\_PROJECTS' parameter within the existing /BTI/TE\_TVARV table in the ActiveControl Domain Controller.

Data Browser: Table / BTI / TE_TVARV Select Entries 1											
« 🕫 🖴 🖶 🗟 🖬											
Table: /BTI/TE_TVARV Displayed Fields: 6 of 6	Fi	xed C	olumns	: [2] List Width 0250							
NAME	NUMB	SIGN	OPTI	LOW	HIGH						
EXCLUDE_INACTIVE_PROJECTS	0000	I	EQ	x							

More details on this Enhancement and underlying Configuration can be found in this Change Note

### **3.4. Caching of WebUI Metrics**

During 2020, a couple of higher transport volume ActiveControl customers reported performance issues whilst clicking on the WebUI Metrics such as "Awaiting my Approval" or "Awaiting my testing".

To address this performance constraint, caching has been introduced to the WebUI metrics. When this caching is activated, when a user opens one of the metrics during a session, then if they come out of the screen and then go back into the same metric, the same data will be loaded.

#### **Configuration Steps**

The caching of WebUI metrics is done via two new parameters in /BTI/TE\_TVARV table in the ActiveControl Domain Controller.

TE\_WEBGUI\_METRIC\_CACHE\_TIMEOUT – this is used to set the cache timeout in seconds (default 300)

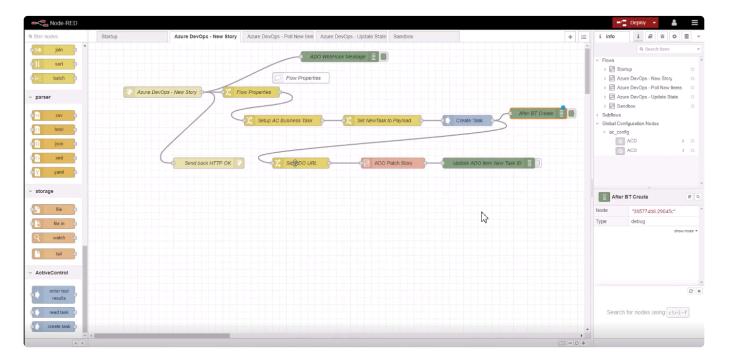
TE\_WEBGUI\_TASKLIST\_NO\_STATS - this is set to X to avoid calculation of task statistics

### 4. Node-Red Integration Framework

ActiveControl has long offered an Integration Framework to enable integrations with tools such as ServiceNow, JIRA and HPSM.

Over the years, this Integration Framework has been expanded as new and existing customers have requested integrations with new products, or indeed to introduce additional capabilities with existing ActiveControl integrations. This has often required significant Development work within Basis Technologies, and as a result, sometimes also detracted the focus from other important product evolution. As a result of this impact – and also due to customer feedback over the last couple of years – Basis Technologies are introducing a new Node-red Integration Framework as part of ActiveControl 8.40, which over time is intended to replace the existing SAP Integration Framework.

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways. It provides a browser-based graphical editor that makes it easy to wire together flows, thus Basis Technologies believe will allow our Delivery Consultants and Customers to become much more self-sufficient in the setup of new and existing Integrations between 3rd Party tools and ActiveControl.



The Node-RED framework added as part of ActiveControl 8.40 is aimed primarily at ITSM, DevOps and Automated Testing tool integrations – ie where the common integration use-cases are:

(1) automated creation of a Business Task at the appropriate point in the corresponding ticket lifecycle.

(2) automated updates to a Business Task, when the fields on corresponding ticket are updated.

(3) automated updates to the ticket status, when the corresponding Business Task reaches (configurable) Deployment statuses.

(4) automated signoff of Testing of a Business Task, based on a (configurable) ticket status change.

(5) automated signoff of Testing of a Business Task, based on feedback from 3rd Party Automated Testing tools.

The above – plus some other actions currently covered by the underlying suite of ActiveControl SOAP APIs will be available as of ActiveControl 8.40.

The expectation is that during early 2021, some Templates will be created by Basis Technologies for popular Integration requirements such as JIRA or Azure DevOps, to make it quicker and easier to implement these Integrations at new customers. It should be noted that Basis Technologies consulting services will still be needed in most cases in the short-term, to help Customers setup both new and existing Integrations via Node-Red. Over time, the effort and cost to do this will reduce through the use of Templates.

#### **Configuration Steps**

Please refer to the Node-Red Integration Guide for details on setting up an integration using this new capability. This Guide is available via https://docs.basistechnologies.com/

Basis Technologies intend to introduce RESTful APIs as part of AC8.50 during 2021, as an alternative to the current SOAP APIs.

## **5. Other Integration Enhancements**

### 5.1. SmartShift APIs

ActiveControl 8.30 introduced a new integration between ActiveControl and smartShift, a 3rd Party product developed by <u>smartShift Technologies</u>

On the back of feedback from the initial pilot Customer using this integration, some enhancements have been done to the existing Integration capabilities.

#### Import parameter for smartShift Merge API

A new Import parameter has been added to the Merge Notification API. More details on this can found in this <u>Change Note</u>.

#### New API to check for Conflicts

This new API will enable customers to check for conflicts in a target Development system against an inputed set of transports. More details on this new API can found in this <u>Change Note</u>.

#### API to read TF custom fields

This new API will enable customers to read Transport Form custom fields from within a 3rd-Party tool like SmartShift. More details on this new API can be found in this <u>Change Note</u>

### 5.2. Webhook (POST)

Increasingly, Basis Technologies customers are wanting to send information from ActiveControl to other 3rd Party products such as Automated Testing tools.

Back in 2020 as part of the Jenkins integration, an enhancement was delivered to sent a GET request to a webhook. This is detailed <u>here</u>.

ActiveControl 8.40 introduces an CI webhook that supports a POST method to send a payload with Business Task and Transport Form details. This is done via new key CI\_INTEGRATION\_METHOD\_XX (where XX is the number of the Integration). When this is set to POST, ActiveControl will generate a hierarchical payload with

- 1) All the affected Business Tasks
- 2) All the live (ie not Complete) Transport Forms associated with these Business Tasks. (whether relevant for the Integration event or not)
- 3) the location of these transports, along with the relevant statuses.

4) All Custom Field information, for both the Business Task and Transport Forms.

Only header data is sent as part of the Payload. (Ie no Tester / Event / Planning Data or Attachments information is sent). These will bypass AC's mapping framework and pass on the data as-is for consumption on the receiving end.

Sam	uple ncjson
	инстирии > 3 КВ
1 [	
2 {	
3	"IO": "1001803150000013789",
4	10 - 101.003.10000001.7/07 , "CAPTON: "ESTE-904",
5	Curian: (Estereou) Reference: "Ester-Joos",
6	rectors : torses and the second
7	TYPE1: 100110600000000017,
8	TESTERIC' X SUGLAVITA',
9	PRIORITY 23,
10	PROJECT: 10018047/0000014297",
11	"LOKKED": "',
12	PATH: "00',
13	STAT_DEPL': "100171006000000025",
14	"STAT_PLAN": "",
15	"STAT_DEPL_MNN": "X",
16	STAT_PLAN_MANT: "*,
17	"OWER": ",
18	"TEXT": "tettets tysikjhds fkjshflk asfölkhjksadf hkjshfkshadflk sjhafk ssdakfhdf sadjkfn sadf sdfakjhsdaf sadfkjn sdfkljsadhf sdfakjf hsadjkhfasd lkdsajfhasdf dfljhsaf sdaflkjashfas kfinsakfn sdfkjhsadf sadf",
19	rcr_ses": "',
20	re_5121: ",
21	"CF_513": "",
22	"CF_517": "",
23	"CF_518": "',
24	"CF_519": "',
25	"CF_520": "",
26	"CF_521": "",
27	"CF_522": "",
28	"CF_528": "",
29	"CF_529": "",
30	"CF_530": "",
31	"CP_531": "",
32	"CF_532": "",
33	"CF_533": "",
34	"CF_S34": "',
35	"TRANSPORTS": [
36	(
37	"TRKORM": "ACDK901241",
38	"REQTEXT": "",
39	"FORMDESCRIPTION": "",
40	"GROUPID": "100171006000000000",
41	"TYPEID": "10017100500000000000",
42	"TRFUNCTION": "",
43	"TRCATEGORY": "",
44	"TRSTATUS": "",
45	"CLINN": ",
46	"REQUESTOR": "KSULADUTHU",
47	"REQUARE": ",
48	"REQUATE": "20188010",
49	"REQTLME" : "270345",
50	"RELATE": ",
51	"RELIDE": ",
52	PATH': "03",
53	"HASTORY": "",

Figure: Sample json containing all Busines Task and Transport Form information (both standard and

custom fields

### **Configuration Steps**

As well as the usual SAP-based Integration table setup, the following is required in /BTI/TE\_TVARV

	Data Browser: Table / BTI / TE_TVARV Select Entries 2											
6	40 🕄 🐣 🖶 🗟 🗿 🔟											
	ble: /BTI/TE_TVARV splayed Fields: 6 of 6	Fi	ked Co	olumns	s: [2] List Width 0250							
	NAME	NUMB	SIGN	OPTI	LOW	HIGH						
	CI_INTEGRATION_METHOD_24 CI_INTEGRATION_URI_24	0001 0001	I	EQ	POST /task/update2							

Figure: Example configuration of the new CI\_INTEGRATION\_METHOD\_XX

### 6. Parallel Imports

During 2020, one of Basis Technologies enterprise SAP customers that is already embarking on their S/ 4 transformation highlighted issues relating to the long deployment times of certain S/4HANA objects such as CDS View extensions. Transports containing such objects could often take 1-2 hours to import into the target system – which meant that during import during ActiveControl (or indeed standard SAP itself), they became a bottleneck for other – almost always unrelated – transports to be imported, resulting in delays in delivering changes for testing, and thereafter to Production.

This has always been a challenge on systems like BW, but it becomes more of an issue on a primary S/4 system where the volume of change is higher. It is particularly problematic at higher transport volume SAP customers.

As a result of some discussion between this Customer and SAP – and subsequently with Basis Technologies, ActiveControl 8.40 introduces a new capability whereby it is possible to kick off a second 'parallel import' into a Target system in which an import is already happening.

This is done using new 'Approve and Import' button available to authorised users in the Windows GUI and WebUI.

A Basis Technologies ActiveControl		– đ
Eile Edit View Tools Actions Help		
Create Transport Form 📋 Create Business Task 🕞 Refresh	Delete	
Transports	Inbox of ECC QA System (RMCL	
🐺 🐂 🖵 Transport Paths 👻 👧 Transport Selection 🗸	🛛 🚛 🚹 View: 🛛 By Project and Task 🔹 Groups (All) 🔹 🍠 Analyse 🛛 🏈 ShiftLeft 🖓 Approve 🖗 Approve and Import 🖓	LD Reject
ECC Path	= BAU	-
	A BAO GREATER A CONTROL OF	
	🗅 👌 Request Description Group Requested By	Released / 💥 👁 🕯
E Outbox	D01K956614 RMCL 09NOV NOT rule BASIS McLanachan Ro	oss 09/11/2020 12:15:12
T01 - ECC QA System (RMCL		
Test Queue Outbox		

Figure: New 'Approve and Import' button in the Windows GUI

	ActiveControl	) Dashboard	Analytics	Overview	Projects	E Reports		D01K9	56614		Q, <sub>Ed</sub>		) User Role   <b>McLana</b> ate approvals   Help		ደ
	Analysis / Show transports	Search re	esults: D0	1K956614	Project	All		•	<b>×</b>	Group by:	Path & Targ	et / Location		•	×
		0	т	ask				Project		Group	Priority	# Objects / # Keys	Conflict / SCI / Risk Status	Owner	
む	Approve and Import	ECC Path: T	01 - ECC QA S	/stem (RMCL - Inb	oox (1)										
80 5	Reject	0 🤹 🦪	F V d	RMCL 09NOV NOT RMCL 09NOV NOT Vaiting to be appro lefined) Show all transports	T testing oved into T01 - F	ECC QA System (RMCL (No appr	rovers	BAU		Finance & Controlling	Normal	0/0		A McLanao Ross	chan
$\odot$	Refresh														

Figure: New 'Approve and Import' button in the Web UI

In the Windows GUI, it is possible to select the Import Method to be used as part of a Parallel Import. In the Web UI, the default Import Method for the target will be used.

#### 0070 Check Parallel Import Possible

A new automated analysis check (0070 Check Parallel Import Possible) will run automatically during the 'Approve and Import' process, to confirm that that the parallel deployment is technically feasible – and more importantly – safe to do so alongside the Import that is already running. This new 0070 analyser will essentially check the following:

- 1) that the Target is configured for parallel imports
- 2) that the Target is not a Merge Target
- 3) That there are no object overtake/regression warnings

4) That DDIC objects are not contained in both the i) transports already being imported, and ii) the transports on which the 'Approve and Import' is being performed.

If any of these checks fail, then the Parallel import will not be allowed to proceed. Instead, the Transports will solely be approved and moved into the Import Queue for import as part of the next automated or manual import once the current running import finishes. And a message will be presented to the User to tell them that the parallel import has started.

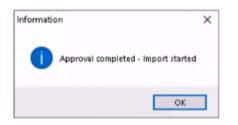


Figure: Message presented to Approver to tell them that the Parallel Import has started.



Figure: Message presented to Approver if the parallel import is not possible.

rget Proper	rties - ECC QA System (RMCL	(T01)			
General Impo	ort Options Import Options II Inb	x Approvers	Outbox Approvers Analysis	Турез	
Location		Se	ettings		
✓ AII			Parameter	Value	
Inbo		E	Attributes		
	ort Queue		ld		
lest	Queue		Name		
Outo			Mandatory		
			Check Subsequent Targe	et	
nalysis Type	e		Approval & Import Preven	ntion	
			Parameters		
ld	Description	^	KEY_NO_RELATED_VIEW	NS	
0061	Critical impact analysis		KEY_NO_WILDCARDS		
0062	Check Inter-dependencies in F	at	RISKGROUP		
0063	Approver SOD Check				
0064	Check SAP Import				
0065	Integration status check				
0066	Version Comparison				
0067	Impacted Batch Jobs Check Transport(s) Presence				
0069	Dev Enforcer: Check ABAP Te				
0070	Check Parallel Import Possible				
0001	DN Taet _ Cuetom Taet Impact	De			

Figure: New "Check Parallel Import Possible" analyser. This does NOT need to be manually configured.

Details of the messages that might be experienced during the Parallel Import process can be found in this <u>online Knowledge Article</u>.

The new 0070 'Check Parallel Import Possible' analyser forms part of General Analysis – it does NOT need to be manually switched on by the ActiveControl Administrator. It is triggered automatically as part of the 'Approve and Import' process.

#### **Configuration Steps**

1. Activate the new "Parallel Imports" flag in the target(s) where you want Parallel Imports to be possible.

et Properties - EC	C QA System (R	MCL (T01)						
neral Import Options	Import Options II	Inbox Approvers	Outbox Approvers	Analysis Types				
nport Options								
Import Method	Import one reques	st at a time		~				
Try to import tra	nsport requests in t	the order that they	were imported into th	e predecessor target.				
(None)				~				
Force transp	ort dependencies v	when importing in s	ame order as predec	essor system.				
	kground job to autor cified in the followir			Optionally specifiy additional import schedules				
(None)			$\sim$	*				
Suppress impo	rt analysis during s	cheduled imports						
No			~					
Import jobs s	cheduled by Active	Control		Orchestrated				
Continue imp	orting transport req	quests when an imp	port error occurs	Timeout for delayed imports (minutes) 10				
Continue imp	orting queued trans	sport requests for s	scheduled imports	Ignore System Id during import (CTS+ only)				
Automatical	y create backup tra	nsport requests		Parallel Import				
erge / Parallel Dev	elopment Stream	s						
Perform con	flict analysis agains	t this target	Rec	uire that transports with changes to SAP objects be manually merged				
Client to be used	d during conflict ana	ilysis:	Cre	ate a merge transport request in this SAP system after importing changes				
			Fix ren	amed objects in merge requests :				
Default package	for merged objects		Never	Never 🗸				
			Ade	all dependant routines and formulae for BW merges				
			🗌 Inhe	rit merge transport owner from original transport (CTS+ only)				

Figure: Parallel Import flag is enabled against individual Targets in the Windows GUI.

2. (optional) If you want to exclude certain Objects from being able to be included in Parallel Imports, you should configure these via a new and distinct Risk Group (using the usual /BTI/TE\_RISKG, /BTI/TE\_RISKGOB and /BTI/TE\_RISKGOBT configuration detailed in seperate <u>online Knowledge Article</u>), and add that to the RISKGROUP parameter as part of the 0070 Analyser.

As of ActiveControl 8.40, there are no new Authorisations sitting behind the new Approve and Import button in the WIndows GUI and WebUI. If a user is defined as an Approver (either via Windows GUI configuration or via the newer Rules Engine approvers consumer) for a particular Inbox, then they will also have the ability to trigger a parallel import by using the "Approve and Import" button. Depending on Customer feedback, we may look to add an authorisation behind the "Approve and Import" in a future release of ActiveControl.

\* It is technically possible to have more than two parallel imports into a Target at any one time.

Parallel imports is a new functional capability within ActiveControl and indeed as a concept within standard SAP. For customers that want to utilise it as part of Upgrades or new Implementations of ActiveControl, it is strongly recommended to perform appropriate testing of the capability before introducing its usage to a Productive environment. It should also be noted that we believe this will work only from tp tool version 381.195 onwards.

## 7. Enhanced Rules Engine

# 7.1. Auto-assign Approvers based on SAP Roles

Since ActiveControl 8.0, the Rules Engine has facilitated much more flexibility and granularity around Approvals within ActiveControl.

One aspect of this improved flexibility is the use of User Roles (configured on the User Roles tab of the Windows GUI configuration screen) to help determine who can do Approvals in the relevant Inboxes and Outboxes within the Workflow, rather the historical configuration of Inbox/Outbox approvers via the Target configuration screens in the Windows GUI.

Over the years, several customers have requested that they would like the maintenance of Approver assignments to be done outside of the Windows GUI Configuration screens – to enable the maintenance of Approvers to be done by other resources, such as a Securities & Authorisations Team instead of the ActiveControl Administrators.

To help facilitate this requirement, ActiveControl 8.40 introduces new automation around User Role assignments. A new Program /BTI/TE\_RU\_SAP\_2\_BTI\_USER\_ROLE can be run periodically (or via a scheduled job) to automatically add the User Role assignments in ActiveControl based on users having been assigned/de-assigned to/from SAP roles, based on a mapping configured in underlying table.

This allows Customers to put the responsibility of Approver user maintenance back on Securities team,

#### **Configuration Steps**

1. Configure the desired User Role / SAP role mapping in table /BTI/TE\_SAP\_2BTI in the Domain Controller.

Change View "SAP role to BTI user role assignment": Overview					
🞾 New Entries 🐚 🚘 🐼 🛃 🖪					
SAP role to BTI user role assignme	ent				
Role	Internal ID				
Z_BASIS_APPROVERS	00000000000000000033	<b>A</b>			
Z_BASIS_AUTHS	00000000000000000000026	<b>*</b>			
Z_BW_APPROVERS	00000000000000000000028				
Z_FICO_APPROVERS	000000000000000000000000000000000000000	#			
Z_HCM_APPROVERS	000000000000000000000000000000000000000				
Z_SECURITY_APPROVERS	000000000000000000000031				
Z SUPPLYCHAIN APPROVERS	000000000000000000000029				

#### 2. Run (or schedule) program /BTI/TE\_RU\_SAP\_2\_BTI\_USER\_ROLE in the Domain Controller

### 

More information on this Enhancement be found in this online Change Note

### 7.2. NOT condition

As part of the Rules Engine introduced as part of ActiveControl 8.0, it is possible to setup complex step logic which drive the behaviour of Approvals and/or Skipping within ActiveControl.

"AND" and "OR" step types were already possible in /BTI/TE\_RE\_STEP – but on the back of Customer feedback, this has now been extended as part of ActiveControl 8.40 to also include "NOT".

NOT allows the inversion of the original True or False output of the underlying Step Condition, and is a good way of avoiding multiple OR step conditions. As a simple example, if a Transport Form should stop for an additional approval if it is [Priority] = "Emergency", but not skip if it is "Low", "Normal" or "High" priority. Prior to ActiveControl 8.40, it would have been necessary to setup three skipping conditions. Now the same requirement can be achieved with only one NOT-based skipping condition, resulting in less configuration.

#### **Configuration Steps**

An example of NOT step type configuration can be found in this online Knowledge Article.

### 8. Enhanced Transport of Copies

In recent years, a growing number of new ActiveControl customers want to continue using Transport of Copies functionality that they used previously as part of their process.

Historically, this has required Basis Technologies to deliver customer-specific User Exit based solutions, and occasionally meant protracted implementation of ActiveControl whilst such solution was agreed and built. ActiveControl 8.2 moves a lot of the User Exit solutions that have been delivered over the year to customers into the standard product, via a central configuration table in the Domain Controller. This essentially enables the following to be done via configuration:

- Automated creation of TOC based on a (configurable) event (eg Dev Test Queue signoff, Outbox Approval)
- Automated creation of Transport Form for the TOC
- Automated movement of original unreleased Transport Form on QA testing signoff.

# 8.1. Enhanced Transport of Copies (TOC) configuration

Around 10-15% of Basis Technologies customers use Development 'Transport of Copies' (TOCs) as part of their ActiveControl workflow.

As such, when Development is completed, the original transport is left unreleased in Development whilst a Transport of Copies (TOC) is deployed to QA for testing. And the original transport is only released and deployed on completion of successful testing of the <u>TOC</u> in QA.

ActiveControl has offered a Dev TOC capability for many years – but the functionality has always had a couple of limitations, which has frequently resulted in User Exits having to be created by the Basis Technologies Development Team to add capabilities like automatically creating the Transport Form for the TOC.

To avoid the need for these custom User Exits – ActiveControl 8.40 introduces a new and enhanced standard configuration table that we believe will help to make our customers (and the Basis Technologies Delivery consultants) more self-sufficient in implementing a Transport of Copies process at our customers, without the need for custom User Exits.

This configuration table includes the capability to manage the follow aspects of a TOC process:

What the trigger for the TOC creation should be. This can be (1) Manual, (2) on Creation of the original TR Transport Form, (3) When the original TR travels (ie is approved from a particular location or (4) When the original TR is approved (but you want to prevent it from travelling forward in the workflow 2) Whether a Transport Form is automatically created for the TOC

3) What the Type and Group metadata for the automatically created TOC Transport Form should be4) Whether the TOC Transport Form should be assigned to the owner of the original Transport Form, or to the RFC user.

5) Whether the automatically created TOC should be automatically released or not.

6) Whether the original Transport Form should be automatically locked when the TOC is created

7) To filter further on what TFs will generate an automated TOC using the Rules Engine (for example to exclude Securities roles transports or OSS Notes from having TOCs automatically created)

.... and many more.

#### **Configuration Steps**

New /BTI/TE\_VAUTOCON table should be configured in the Domain Controller based on the exact Customer requirements.

Display View "	AC AutoToC Configuration": Details				
🦻 🗟 🖨 🔛					
Source Path	3				
AC AutoToC Configuration					
Target ID	10				
Location	D Outbox				
Step Id					
Path for Dev ToC	0				
ToC Trigger	C Create				
Create Transportform					
Orginal TR Lock					
Dev ToC Group ID	10019090900000073884				
Dev ToC Type ID					
User ID	O Original User ID				
Dev Toc Release					
Dev Toc Reject					
Dev Toc Sign Off					
Unlock Original TR					
Original TR Release					

More details on this Enhancement and underlying Configuration can be found in this Change Note

#### **Example Configuration Setup**

- Example TRAVEL trigger configuration in this Knowledge Article.
- Example APPROVAL trigger configuration in this Knowledge Article.
- Example configuration to filter the TOC creation using Rules Engine is detailed in <u>this Knowledge</u> <u>Article</u>.
- Please note that customers using user-exit solutions for Transport of Copies will need to migrate to this new standard capability as part of upgrading to ActiveControl 8.40 (or subsequent versions of ActiveControl).

### 8.2. Prevent a TOC of a TOC

In addition to the standardised Transport of Copies configuration within ActiveControl 8.40 – an additional configuration option as been added to our out-of-the-box TOC offering.

On the back of customer feedback over the last couple years, it is now possible to prevent a TOC being created via ActiveControl on a TOC that was also created by ActiveControl. The principle here is that you should not be creating TOCs of TOCs – if your testing of your initial TOC fails, then you would make the changes to the original unreleased transport, and then create a TOC of that amended original transport. There is not really any situation whereby a Developer or Functional Consultant should need to create a TOC of a TOC.

The prevention of creating TOCs of TOCs is managed via a new configuration option in ActiveControl 8.40

When this new config option is enabled, the user will be presented with an error message in the Windows GUI or WebUI if they attempt to manually create a TOC of a TOC via ActiveControl.

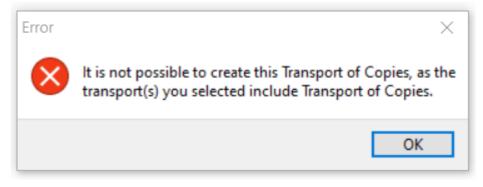


Figure: Message preventing TOC of a TOC in the Windows GUI

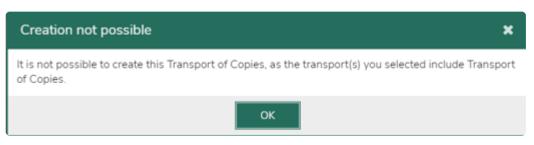


Figure: Message preventing TOC of a TOC in the Web GUI

#### **Configuration Steps**

Switch on the new STOP\_TOC\_OF\_TOC option in the existing /BTI/TE\_TOCONFIG table.

Data Browser: Table /BTI/TE_TOCONFIG Select Entries 1								
Table: /BTL/TE_TOCONFIG Displayed Fields: 12 of 12 Fixed Columns: [1] List Width 0250								
KEYFIELD CREATELEVEL SELECTLEVEL REMOV	EONOVERTAKE DELETE_EMPTY	AUTO_RELEASE	OPEN_NEW_TASKS	DEPLOYTYPEID	DEPLOYGROUPID	DEPLOY_TR_TARGET	RELEASE_DEPL_TO	STOP_TOC_IN_TOC
01 T T X	x	x				DUM		x

### 8.3. TOC transport naming

Prior to ActiveControl 8.40, Transport of Copies created via ActiveControl were automatically given a transport description that matched the Business Task subject.

Some customers reported this as confusing, especially when a Business Task contained multiple transports.

As such, the new standard TOC functionality added as part of AC8.40 will also now result in the TOC the same description as the original source transport, where the configuration has CREATELEVEL = T (Transport).

#### **Configuration Steps**

No configuration is required for this.

## 9. Other Enhancements (8.40)

### 9.1. Standard User Exit (0610) – Transport Type

It has always been possible within ActiveControl to pre-populate the Transport Form [Type] and [Group] fields, based on the last values selected by the user when previously populating a Transport Form.

Some customers did not like to prepopulate these fields, as they felt it was not always a given that the User was always creating Finance (for example) related Transports, or indeed always creating Workbench or Customising transports. And they thought there were more likely be wrong data if they did not force the Developer or Functional consultant to populate the fields each time.

But at the same time, they also highlighted to Basis Technologies that it would make more sense if the [Type] field was populated based on the SAP information (eg Customising, Workbench, Transport of Copies etc)

For this reason, ActiveControl 8.40 introduces a new standard User Exit that can be switched on and configured so that the Transport Form [Type] is populated based on the standard SAP information about the transport.

#### **Configuration Steps**

The following configuration is required in the Domain Controller to enable this functionality.

- 1. Enable user exit /BTI/TE\_EXIT\_AUTOADDTFTYP\_0610 via table /BTI/TE\_EXITC
- 2. Configure entries in table /BTI/TE\_TVARV for the parameter TRANSPORT\_FORM\_TYPE\_0610.

Table: /BTI/TE_TVARV Displayed Fields: 6 of 6	Fixed (	Column	s: 2 List Width 0250	
NAME NAME	NUMB SIG	OPTI	LOW	HIGH
TRANSPORT FORM TYPE 0610	0001 I 0002 I 0003 I		К И Т	1001710060000000019 10017100600000000020 10020101300000254836

'LOW' = the transport type as defined in table E070 field TRFUNCTION 'HIGH' = be the type id as defined in table /BTI/TE\_TYPE

Please note that it is not possible to use this User Exit in conjunction with the existing "Prepopulate Type, Group and Path" global configuration option in the Windows GUI. If both are switched on, then the Prepopulation option will take precendence. \* More details on this new User Exit capability can be found in this Change Note

# 9.2. User Exit Hook (0093) – Saving Attachments

ActiveControl 8.40 introduces a new User Exit Hook at the point of saving attachments within ActiveControl.

User Exit 0993 was added on the back of a customer requirement to be able to control and limit the size of attachments uploaded into ActiveControl (eg nothing more than 5MB could be added). Using this user exit hook, customers can build their own solution to perform such attachment validation.

#### **Configuration Steps**

- 1. Develop the desired Function Module, as a local Z copy of sample /BTI/TE\_EXIT\_SAMPLE\_0993
- 2. Activate the Z user exit in /BTI/TE\_EXITC in the Domain Controller.

# 9.3. Open Windows GUI with no location selection

Some of our customers that have higher transport volumes reported the Windows GUI was taking a long time to load up – sometimes as much as 30-40 seconds.

Part of the reason for this was the loading up of the Transports in the Path/Target location during the initial load. If that Location happened to have many (ie many hundred, or even thousand) of transports sitting in it, then it negatively imported the load-time performance of the ActiveControl application.

To mitigate this, a new 'Open application with no active location' checkbox bas been added to the Windows GUI login screen.

- If the checkbox is ticked the GUI will open without any location.
- If the checkbox is not ticked the GUI will open with the last location (if one is available).

		Version 8.4 (Build 1988)
	ActiveControl	
Connect to:	ACD via VPN	$\sim$
Client	100	[Config]
User ID:	rmclanachan	
Password:		
<u>L</u> anguage:	English ~	
	Open application with no active location	
CreateSSO Sh	ortcut	OK Cancel

Figure: New 'Open application with no active location' checkbox

Also note that as part of ActiveControl 8.40, the Fast Start options have been moved to the [Config] screen

Path	Туре	Description
Entries from SAP RFC Driver ✓ C:\Users\Ross\AppData\Roaming C:\Users\Ross\AppData\Roaming C:\Program Files (x86)\Basis Tech	Registry	HKEY_CURRENT_USER\Software\SAP\SA
Enable Fast Start Enable Fast Serialization [Back to Logon Page]		🖌 Set Default

Figure: 'Enable Fast Start' and 'Enable Fast Serialization' are now switched on via the Config screen

## 10. Bug Fixes (8.40)

# **10.1. New 'Cumulative Patching' support process**

Since January 2020, Basis Technologies support team have 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 8.40 – an interim patch release (eg AC 8.40.1) is created by Basis Technologies. If a second fix is then required for a second customer, then a new interim patch release AC8.40.2 is created that includes this second fix plus also the fix for the first customer contained within AC8.40.1.

This means that a customer requiring a fix will always be given a cumulative patch fix containing all fixes delivered by Basis Technologies 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 (both Enhancements and Bug Fixes) 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 AC8.30**

Various bug fixes to previous releases are included in this latest ActiveControl 8.40 release.

A list of these fixes can be found in these 8.30 Cumulative Patch release notes

This list essentially details all of the fixes added since ActiveControl 8.30 – and by extension – are included in ActiveControl 8.40

### **11. Upgrading to ActiveControl 8.40**

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 8.40, 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 8.40

(1) 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 detailed in these Release Notes. 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 developed was introduced in ActiveControl 8.40, to improve performance of the Overtake/Regression and Conflict Checks by speeding up the checking of Ignore flags. More information can be found in this <u>online Change Note</u>

(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 more than five years. 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.

(4) Please note that if a Customer has created custom entries in table /BTI/TE\_RE\_STEPT in prior versions of ActiveControl – there is a known issue in ActiveControl 8.40 where these will get overwritten by the software transports. This will be addressed from ActiveControl 8.50, but for customers upgrading to 8.40, the recommendation would be to backup (ie export) the table before the upgrade, and then import it after doing the Upgrade, to enable you to retain your custom entries.