

DevOps

You can manage development and release plan, Build & Deploy configuration, and End To End process.

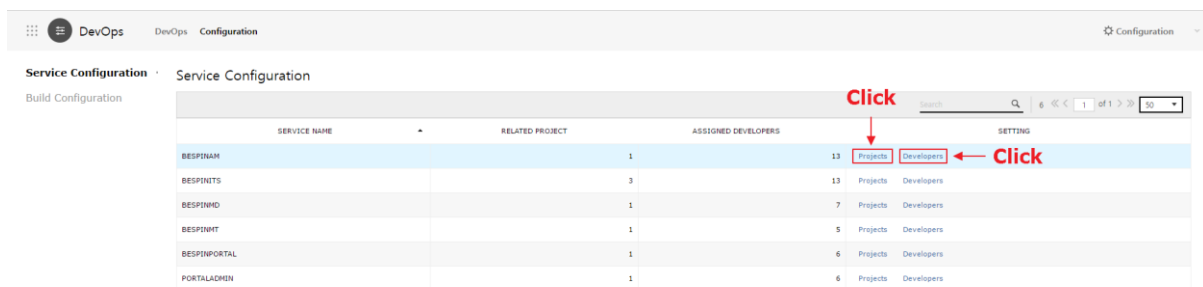
Managing Development and Release Issue

Following is how to manage the release process for each service with DevOps service.

1. Presetting

A. Set the main project and person in charge for process & release for the service.

i. The service group registered in Portal Service will be shown.



SERVICE NAME	RELATED PROJECT	ASSIGNED DEVELOPERS	SETTING
BESPINAM	1	13 Projects Developers	
BESPINITS	3	13 Projects Developers	
BESPINMD	1	7 Projects Developers	
BESPINMT	1	5 Projects Developers	
BESPINPORTAL	1	6 Projects Developers	
PORTALADMIN	1	6 Projects Developers	

ii. You can link the project that manages the service group and set the workflow.

The workflow can be composed in three steps for each development phase (development, verification, operation): Approval, Deploy, and Report.

1. Project mapping

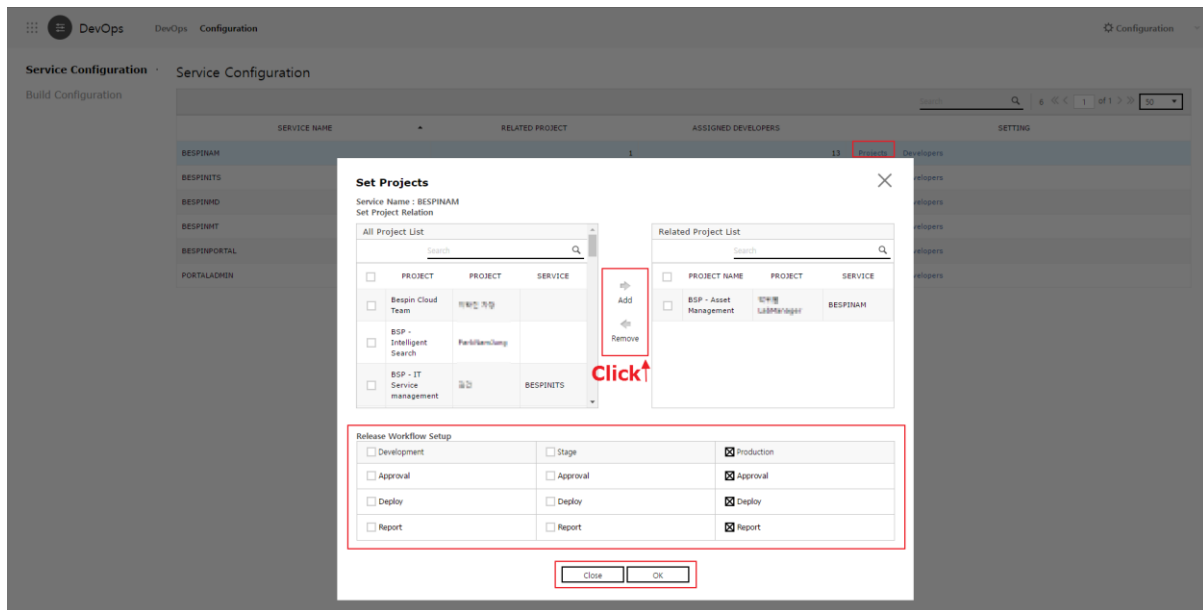
A. Source Repository will be automatically created with a service group code when mapping.

2. Workflow setting

A. Approval: Link Approval Service to link the approval process before deploy.

B. Deploy: Composed Build & Deploy procedures can be included.

C. Report: Deploy report can be simply recorded.



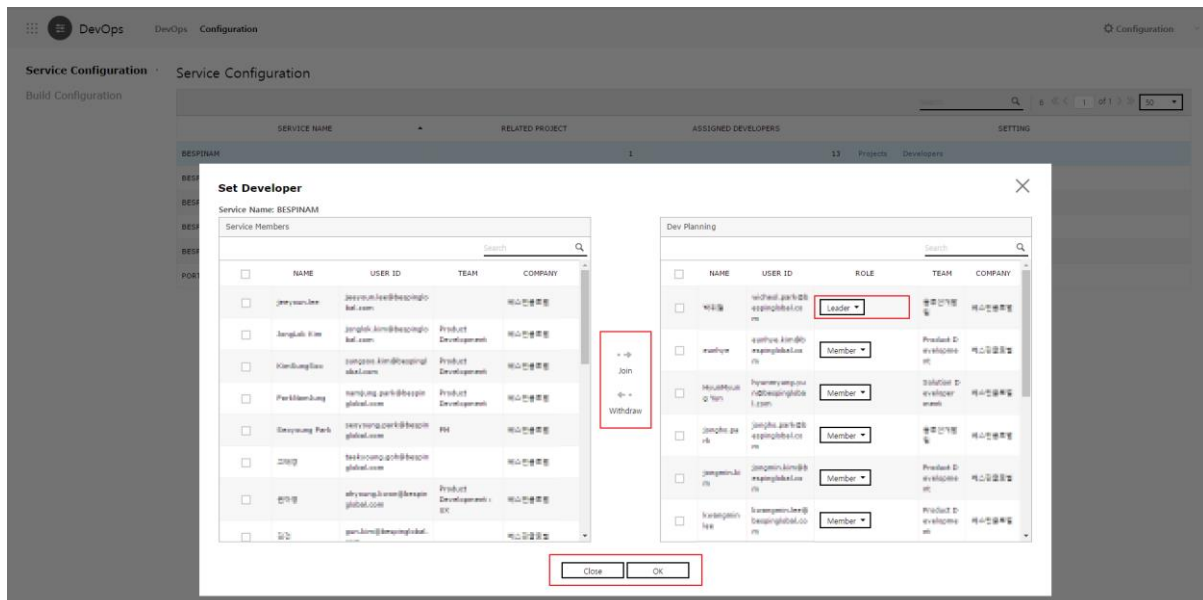
iii. You can set the role of DevOps as a member of the previously linked project.

1. Role

A. Leader: Has all rights to Build & Deploy procedures.

B. Member: Has limited rights in regards to configuration menu usage and deploy that requires approval.

2. Once a role is granted, the permissions to Read/Write Repository & CI services are granted to the relevant ID, and an initial password is sent via e-mail.



B. Add Build configuration.

DevOps

DevOps Configuration

Configuration

Service Configuration

Build Configuration

Create New

Click

Click

Service

Phase

22

<<

>>

1

of 1

>

30

SERVICE NAME	BUILD	REPOSITORY PATH	PHASE	UPDATER	UPDATED
BESPINITS	to-dev-helloworld	trunk/HelloWorld	Development	백승남 Manager(백승남)	2016/10/26 10:53:11
BESPINITS	PUSH_to-dev-apps	trunk/ITS	Development	백승남 Manager(백승남)	2016/10/28 14:57:15
BESPINITS	PUSH_to-dev-batch	trunk/ITS	Development	백승남 Manager(백승남)	2016/11/01 16:06:14
BESPINITS	PUSH_to-dev-openapi	trunk/ITS	Development	백승남 Manager(백승남)	2016/10/28 14:58:41
BESPINITS	PUSH_to-chngprod-all	trunk/ITS	Production	백승남 Manager(백승남)	2016/11/11 09:46:42
BESPINITS	DEPLOY_to-dev-apps	trunk/ITS	Development	백승남 Manager(백승남)	2016/10/28 15:04:09

i. Add a new build configuration with "Create New".

1. Set Service name / Phase / Project name / Repository Path(SVN) / Build Command(SVN) / Script(Shell) / Target Server / etc.

2. Routing Check settings

In case servers are diversified and support routing, this setting secures service continuity when deploying.

A. Health Check Path

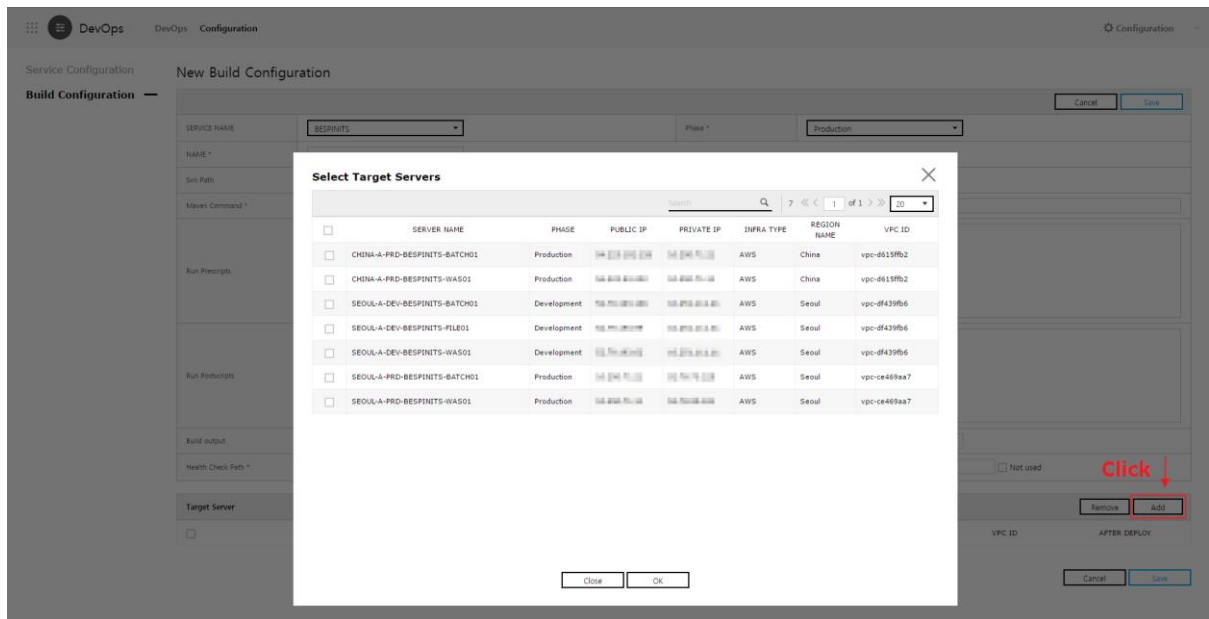
i. Before build and deploy, you can change the file in the server's Health Check Path, block routing by Load Balancer, and proceed with deploy.

B. Logic Check URL

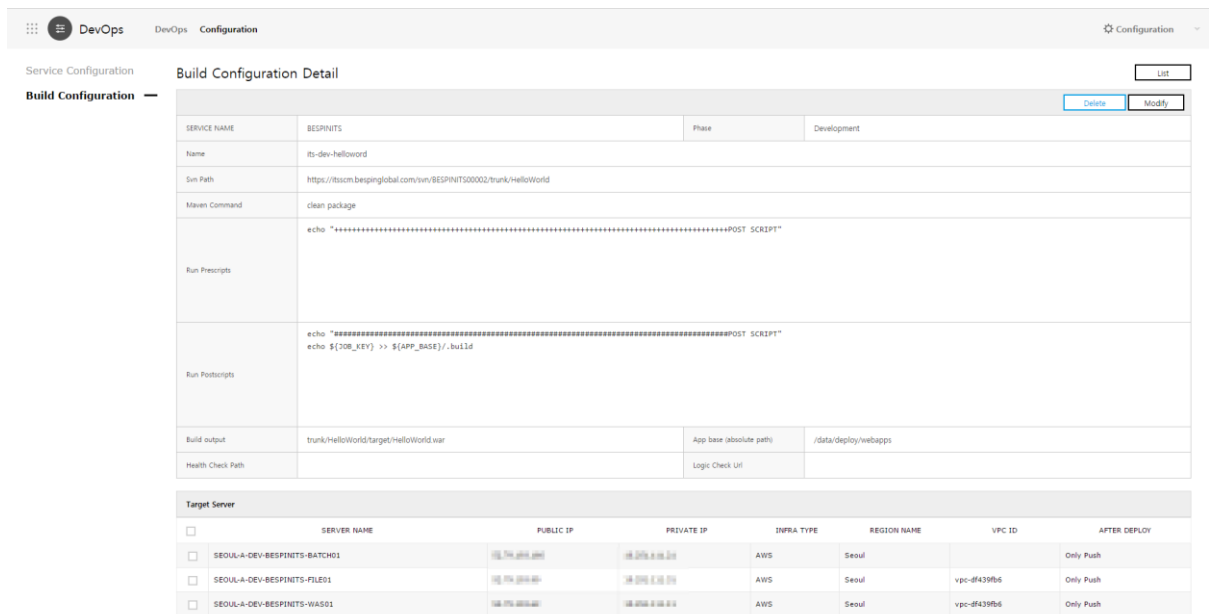
i. After the deploy, you can check the server connection with the entered URL address, restore the files from Health Check Path, and normalize Routing.

DevOps		DevOps Configuration	Configuration															
Service Configuration		New Build Configuration																
Build Configuration		<div> <div>Select Service Group</div> <div>Phase *</div> <div>Select Phase</div> </div> <div> <div>NAME *</div> <div>SVN Path</div> <div>Maven Command *</div> <div>Run Prescripts</div> <div>Run Postscripts</div> <div>Build output</div> <div>App base (absolute path) *</div> <div>Health Check Path *</div> <div>Logic Check Url *</div> </div> <div> <div>Cancel</div> <div>Save</div> </div>																
		<div> <div>target/app-war</div> <div>/data/deploy/webapps</div> <div>/data/deploy/webapps/chev2/check.html</div> <div>https</div> <div>localhost</div> <div>80/login.do</div> </div> <div> <div>Not used</div> <div>Not used</div> </div>																
		<div> <div>Target Server</div> <div>Remove</div> <div>Add</div> </div> <table> <tr> <th>SERVICE NAME</th><th>PUBLIC IP</th><th>PRIVATE IP</th><th>INFRA TYPE</th><th>REGION NAME</th><th>VPC ID</th><th>AFTER DEPLOY</th></tr> <tr> <td colspan="7">No Data</td></tr> </table> <div> <div>Cancel</div> <div>Save</div> </div>			SERVICE NAME	PUBLIC IP	PRIVATE IP	INFRA TYPE	REGION NAME	VPC ID	AFTER DEPLOY	No Data						
SERVICE NAME	PUBLIC IP	PRIVATE IP	INFRA TYPE	REGION NAME	VPC ID	AFTER DEPLOY												
No Data																		

3. Search and link the target server list manually entered via SR transfer.

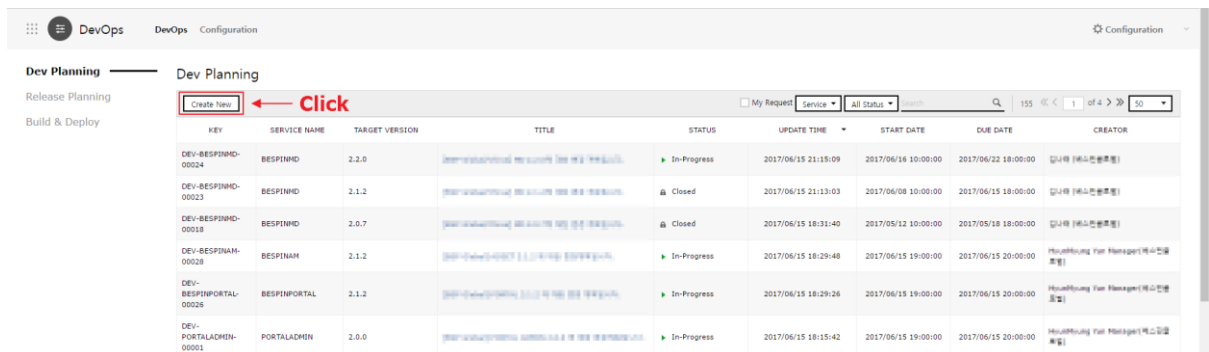


C. Check the build configuration.



2. Development Planning

A. Go to the Dev Planning pane by clicking the "Create New" button.

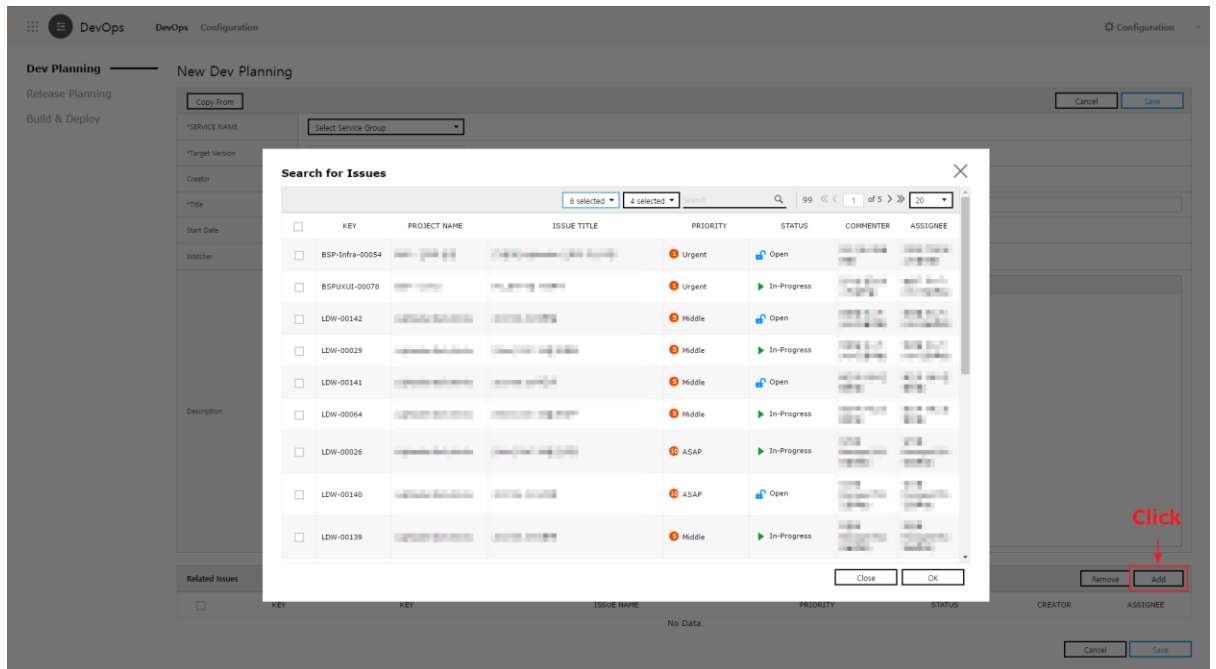


- B. Fill out the form for Dev Planning.
 - i. Select the target service of Dev planning.
 - ii. Enter the release Target Version.
 - iii. Enter the development period, title, description, and watcher.

The screenshot shows the 'New Dev Planning' form in the DevOps interface. The form includes the following fields and components:

- Copy From**: A button at the top left of the form.
- *SERVICE NAME**: A dropdown menu with 'Select Service Group' as the placeholder.
- *Target Version**: A text input field.
- Creator**: A text input field with a placeholder '请选中 (请二选或多选)'.
- *Title**: A text input field.
- Start Date**: A date picker set to '2017-06-16'.
- Due Date**: A date picker set to '2017-06-16'.
- Watcher**: A text input field with a placeholder 'Select Watcher' and a **Search** button. A red box highlights the **Search** button, with a red arrow and the text 'Click' pointing to it.
- Description**: A large text area for entering the description.
- Related Issues**: A section at the bottom with a table for related issues. The table has columns: KEY, ISSUE NAME, PRIORITY, STATUS, CREATOR, and ASSIGNEE. The table is currently empty, showing 'No Data'.

- C. Link the development issues synced and managed with the project service.
 - i. When committing to Source Repository, enter the issue key number of the project service on the first line on Commit Comment and its description after the second line. Then its content will be automatically registered as a comment to Issue, and you can trace the relevant content conversely.
 - ii. Register issues with Commit Log as issues related to Dev planning to check the changed source list on the bottom of the release planning.



3. Release planning

For established and verified development plans, you can write release planning with "Transfer to Release" button.

KEY	PROJECT NAME	ISSUE TITLE	PRIORITY	STATUS	COMMENTER	ASSIGNEE
BSP-Infra-00054			Urgent	Open		
BSPINFUT-00078			Urgent	In-Progress		
LDW-00142			Middle	Open		
LDW-00029			Middle	In-Progress		
LDW-00141			Middle	Open		
LDW-00064			Middle	In-Progress		
LDW-00026			ASAP	In-Progress		
LDW-00140			ASAP	Open		
LDW-00139			Middle	In-Progress		

KEY	PROJECT NAME	ISSUE NAME	PRIORITY	STATUS	CREATOR	ASSIGNEE
BSPITS-00311	BSP - IT Service management	공통기능 서비스 Address 변경 방안 확인 및 수정	Middle	Resolved	정민우 (백스핀글로벌)	정민우 (백스핀글로벌)
BSPITS-00319	BSP - IT Service management	공통기능 서비스 기능 요청 확인된 Related Status / Study Issue 승인 진행 후 처리	Middle	Resolved	정민우 (백스핀글로벌)	정민우 (백스핀글로벌)

A. Write release planning.

- Enter the release planning title, release period, and watcher.
- For release description, please follow the job description form of the company.

[illegible]

- C. Click "Approval" to sync with Approval service and go to Approval pane.
Please refer to User Guide of Approval services for how to write approval.

[Work-00246] [BSP Global/China] 2.1.3. 컬러트랙 대량 승인을 요청드립니다.

List

APPROVAL DETAILS



















Type

Title	[BSP Global/China]

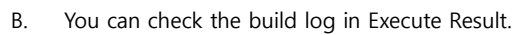
- D. Once approved, the status will change to "Approved". Click the button to go to the approval details pane.
- E. Deploy button is activated; click it to go to deploy execution pane.

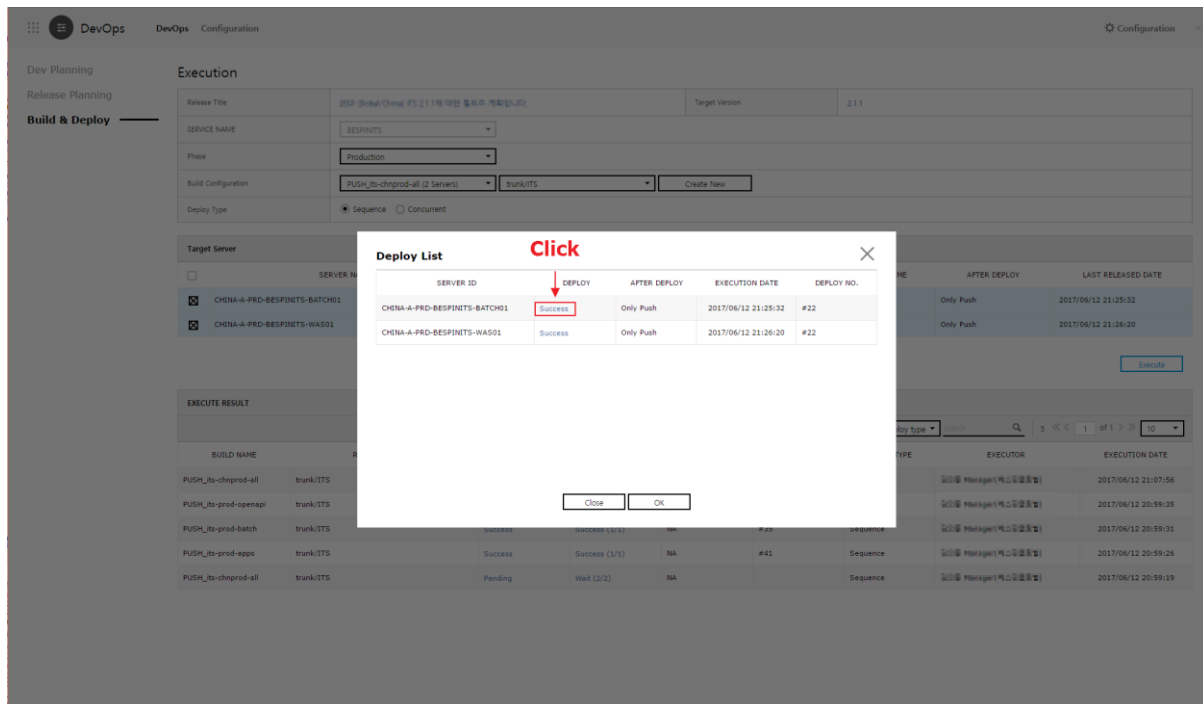
RELATED ISSUES (0) [DEV-RESPONDS-00034 - Click here for list]								
NO	KEY	PROJECT NAME	ISSUE NAME	PRIORITY	STATUS	CREATOR	ASSIGNEE	
1	BSPTS-00304	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
2	BSPTS-00307	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
3	BSPTS-00309	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
4	BSPTS-00310	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
5	BSPTS-00312	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
6	BSPTS-00315	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
7	BSPTS-00316	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	
8	BSPTS-00318	BSP - IT Service management	서비스관리자 메뉴에 대한 수정사항을 10월 15일까지 완료할 예정입니다.	Urgent	Closed	김민준 (Minjun Kim)	김민준 (Minjun Kim)	

ACTIVITY HISTORY		
ACTION	ACTION	
DATE		
이전 페이지로 이동하기 (이전 페이지로 이동)	Closed	2017/06/12 21:46:14
Description		
Report : ETL Progress > Closed 이전 페이지로 이동하기 (이전 페이지로 이동)		
이전 페이지로 이동하기 (이전 페이지로 이동)	Registered Report on Prod	2017/06/12 21:45:54
이전 페이지로 이동하기 (이전 페이지로 이동)	Build & Deploy on Prod	2017/06/12 21:07:56
이전 페이지로 이동하기 (이전 페이지로 이동)	Build & Deploy on Prod	2017/06/12 20:59:36
이전 페이지로 이동하기 (이전 페이지로 이동)	Build & Deploy on Prod	2017/06/12 20:59:31
이전 페이지로 이동하기 (이전 페이지로 이동)	Build & Deploy on Prod	2017/06/12 20:59:26
이전 페이지로 이동하기 (이전 페이지로 이동)	Build & Deploy on Prod	2017/06/12 20:59:19
이전 페이지로 이동하기 (이전 페이지로 이동)	Approved	2017/06/12 20:25:49
Description		
Approval Status Title : [Status: Approved] [Status: Scheduled] [] : 1.0.0 정기작업 자동화 배포계획 - 새작업에 할당 Expires at : 2017-1-1 1:00:00 AM Expires at : 2017-1-1 1:00:00 AM		
이전 페이지로 이동하기 (이전 페이지로 이동)	Submitted for approval on Prod	2017/06/12 19:01:38
이전 페이지로 이동하기 (이전 페이지로 이동)	Created	2017/06/12 14:48:57

SOURCE				
REVISION	KEY	SOURCE	DATE	REQUEST
1836	BSPTS-00307	trunk/ITS/its-core/main/resources/com/its/its-core/app/projects/dao/manager/ItsAppPages.xml	2017/06/08 20:59:28	                               

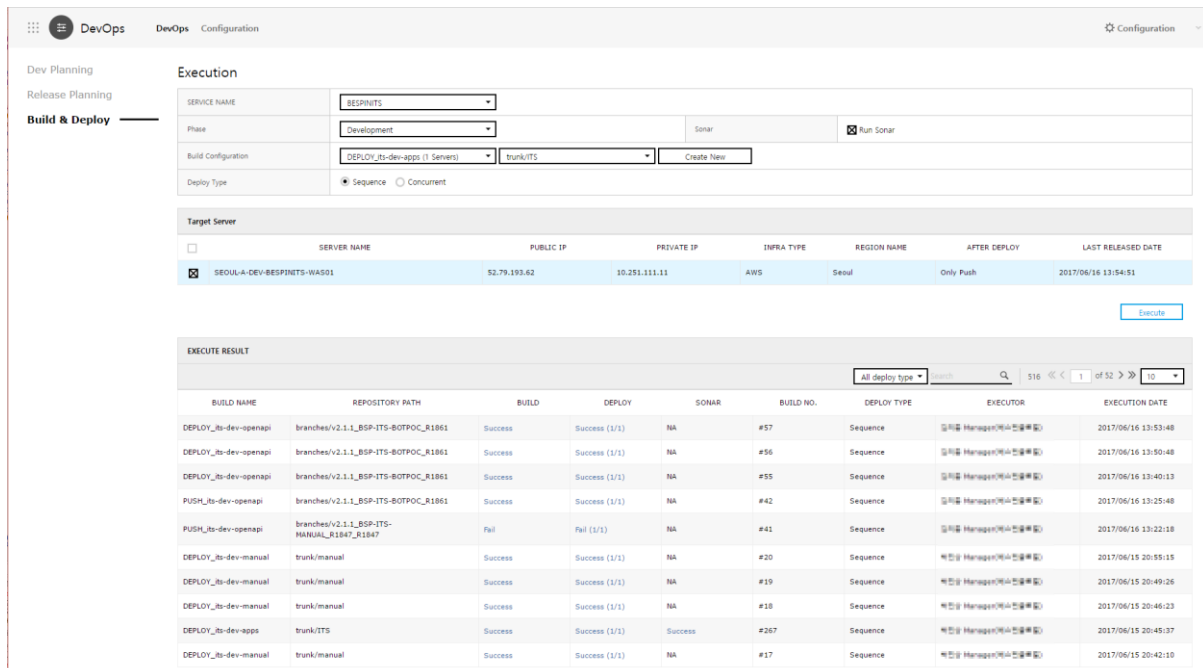
Click "Create New" to create Branch at Source Repository and deploy the relevant Branch.





D. Executing Deploy

- Enter the service & development phase, build configuration, deploy source, sonar analysis, etc.
- You can analyze Sonarqube source with Run Sonar. Extra time to analyze and to execute may be required according to the Source amount.
- You can deploy concurrently or sequentially to the target server by setting the deploy type.



- You can check the Deploy history.

<div> <div>DevOps</div> <div>DevOps Configuration</div> <div>Configuration</div> </div>							
<div> <div>Dev Planning</div> <div>Release Planning</div> <div>Build & Deploy</div> </div>							
<div> <div>Build & Deploy</div> <div> <div>Execution</div> <div>Service</div> <div>Search</div> <div>57</div> <div>1 of 2</div> <div>50</div> </div> </div>							
KEY	SERVICE NAME	TITLE	TARGET VERSION	RECENT BUILD	RECENT DEPLOY	LAST EXECUTION DATE	
BND-BESPINMD-00001	BESPINMD	BESPINMD Execution	NA	Success	Success (1/1)	2017/06/16 16:22:20	
BND-BESPINITS-00001	BESPINITS	BESPINITS Execution	NA	Success	Success (1/1)	2017/06/16 13:53:48	
BND-BESPINMD-00384	BESPINMD	International resource for global	2.1.2	Success	Success (1/1)	2017/06/15 20:00:28	
BND-BESPINITS-00679	BESPINITS	International resource for global	2.1.1	Success	Success (2/2)	2017/06/12 21:07:56	
BND-BESPINITS-00644	BESPINITS	International resource for global	2.1.0	Pending	Wait (2/2)	2017/06/08 04:43:39	
BND-BESPINMD-00361	BESPINMD	International resource for global	2.1.1	Success	Success (1/1)	2017/06/08 02:25:41	
BND-BESPINMD-00351	BESPINMD	International resource for global	2.1.0.1	Success	Success (1/1)	2017/06/05 19:52:27	
BND-BESPINITS-00637	BESPINITS	International resource for global	2.0.9	Success	Success (1/1)	2017/06/03 00:15:13	
BND-BESPINMD-00330	BESPINMD	International resource for global	2.1.0	Success	Success (1/1)	2017/06/01 19:03:47	
BND-BESPINITS-00625	BESPINITS	International resource for global	2.0.8	Success	Success (1/1)	2017/05/31 16:02:12	
BND-BESPINITS-00609	BESPINITS	International resource for global	2.0.7	Success	Success (1/1)	2017/05/25 20:57:22	
BND-BESPINMD-00313	BESPINMD	International resource for global	2.0.8	Pending	Wait (4/4)	2017/05/25 20:14:28	
BND-BESPINMD-00307	BESPINMD	International resource for global	2.0.7	Success	Success (1/1)	2017/05/19 18:00:25	
BND-BESPINITS-00589	BESPINITS	International resource for global	2.0.6	Success	Success (1/1)	2017/05/18 17:24:53	
BND-BESPINMD-00290	BESPINMD	International resource for global	2.0.6	Success	Success (1/1)	2017/05/11 19:00:38	
BND-BESPINITS-00576	BESPINITS	International resource for global	2.0.5.1	Success	Success (1/1)	2017/05/08 16:55:39	
BND-BESPINITS-00568	BESPINITS	International resource for global	2.0.5	Success	Success (1/1)	2017/04/27 17:39:20	

7. Reporting after deploy

- A. Writing Report
- i. Once the deploy is complete, click "Report" button on the Release Plan Details to record the results.

ii. Record the success or failure of release / Rollback / discontinue service / duration of discontinued service / verification statement/ Rollback statement/ etc.

DevOps

DevOps Configuration

Configuration

Dev Planning

Release Planning

Build & Deploy

[REL-BESPINITS-00035] [BSP Global/China] ITS 2.1.1.1

Service Name

BESPINITS

Target Version

2.1.1.1

Release Workflow

Development

Stage

Production

Deploy

Deploy

QA

Approved

Deploy

Report

Creator

Start Date

Watcher

Description

Report

Release Result

Success

Failure

Rollback

Rollback

Discontinue Service

Discontinue Service

Discontinue Service from

2017-06-20 14:58

Discontinue Service to

2017-06-20 14:58

Verification Statement

Rollback Statement

Close

OK

RELATED ISSUES (1)

[DEV-BESPINITS-00035 - Click here for edit]

NO

KEY

PROJECT NAME

ISSUE NAME

PRIORITY

STATUS

CREATOR

ASSIGNEE

1

BSPITS-00323

BSP - IT Service management

Low

Closed

COMMENT

Save

B. Closing release planning

- i. Once the report is complete, complete the release by clicking “Close” button and go to Dev planning.

DevOps Configuration Configuration

Dev Planning Release Planning Build & Deploy

[REL-BESPINITS-00035] [BSP Global/China] ITS 2.1.1.1

Click → Action Close Modify

Service Name: BESPINITS Target Version: 2.1.1.1

Release Workflow: Development Stage Production

Creator: Status: Closed

Start Date: 2017/06/16 19:00:00 Due Date: 2017/06/16 19:30:00

Watcher:

Description:

RELATED ISSUES (1) [DEV-BESPINITS-00035 - Click here for edit] Click

NO	KEY	PROJECT NAME	ISSUE NAME	PRIORITY	STATUS	CREATOR	ASSIGNEE
1	BSPITS-00323	BSP - IT Service management		Low	Closed		

COMMENT Save

C. Closing Dev planning

- i. Check if all the related issues are reflected and handled properly, and close the Dev planning with the “Close” button in Dev planning pane.
- ii. Closing the Dev planning will change the status of all the related issues that are linked as “Closed”.

DevOps Configuration Configuration

Dev Planning Release Planning Build & Deploy

[DEV-BESPINITS-00035] [BSP Global/China] ITS 2.1.1.1

Click → Action Close Reopen

Transfer To Release

Service Name: BESPINITS Status: Closed

Title: [BSP Global/China] ITS 2.1.1.1에 대한 변경 계획입니다.

Release Title: [BSP Global/China] ITS 2.1.1.1에 대한 릴리즈 계획입니다.

Target Version: 2.1.1.1 Creator:

Start Date: 2017/06/16 17:30:00 Due Date: 2017/06/16 19:00:00

Watcher:

Description:

Related Issues (1) Remove Add

	KEY	PROJECT NAME	ISSUE NAME	PRIORITY	STATUS	CREATOR	ASSIGNEE
<input type="checkbox"/>	BSPITS-00323	BSP - IT Service management		Low	Closed		

COMMENT Save

ACTIVITY HISTORY

ACTOR	ACTION	DATE
	Action Changed	2017/06/16 19:30:45

Description

8. Operation scenario of integration of other services

- A. If you link the services below, you can work more organically and efficiently in all the procedures from request gathering, development and testing, and to service release via DevOps.
 - i. SR / Project: Request gathering
 - ii. Monitoring / Alarm: Monitoring of system performance
 - iii. DBQCS: Database quality management
 - iv. Approval: Approval process for each development phase

9. DevOps Constraints

- A. OS has been completely verified only in Ubuntu (Recommend Version 12/14)
- B. Only available in the service environments below
 - i. Java(Recommend Version 1.7/1.8)
 - ii. Apache Tomcat (Recommend Version 7, 8) composition
 - iii. SSH access account must be created to deploy in ITS
- C. By executing deploy server initializing script, the server can be automatically composed in the following order:
 - i. JDK installation : Java Application(Recommend Version 1.8)
 - ii. SSH access account configuration
 - iii. Apache Tomcat installation (Recommend Version 8)
- D. Other constraints
 - i. Build Tool only supports Maven, and can be used after setting the Build Command
 - ii. SCM only supports : SVN, GIT, Bitbucket composition (refer to the details below)
 - 1. Repository establishment, role management, build, sonar analysis, and deploy can only be synced with SVN.
 - 2. When Project Mapping to a service, Repository automatically is composed with a service code (SVN Only).
 - 3. When using GIT / Bitbucket, only the current Commit Log and Project Issue can be synced. It operates after setting DevOps API on the relevant server.
 - iii. CI and QA constituents.
 - 1. CI : Jenkins
 - 2. QA : SonarQube