

ITA\_System\_Configuration/Environment\_Guide

CI/CD For IaC

－Version 1.11－

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Terminology and definitions

This document uses the following terminology.

|  |  |
| --- | --- |
| Terminology | Definition |
| ITA | Abbreviation for “Exastro IT Automation” |
| Link source file | Git repository source files that are linked using the CI/CD for IaC function |
| Link destination function | Refers to the ITA link drivers (Ansible-driver and Terraform-Driver and Terrform-CLI-Driver). |
| Link destination file | Refers to the files uploaded from the following ITA drivers (Ansible-driver and Terraform-Driver).  ・Ansible-Legacy/Playbook file collection  ・Ansible-Pioneer/Dialogue file collection  ・Ansible-LegacyRole/Role package list  ・Ansible common/File list  ・Ansible common/Template list  ・Terraform/Module files  ・Terraform/Policy list  ・Terraform-CLI/Module files |

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# Introduction

This documents explains the system configuration and environment construction needed in order to use the ITA CI/CD For IaC function. In order to use the CI/CD for IaC function, ITA must have its basic functions as well as its Link destination functions installed.

For more information regarding constructing ITA's basic functions, please refer to the "System\_Configuration/Environment\_Guide\_Basic” manual. For more information regarding constructing the Link driver functions, please refer to the respective driver's system configuration/environment construction guide. .

# CI/CD For IaC overview

The CI/CD For IaC can be divided into two functions. For more information, please see the “Exastro-ITA\_User\_manual\_CI/CD For IaC” manual.

Table 2‑1 CI/CD For IaC function overview

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Function name | Application | WEB  contents | BackYard  contents |
| 1 | Git link function | This function creates a clone of the Git repository within ITA.  It will also use the clone to check any updates that might have happened to the source files which will be listed in ITA’s “Remote repository file” menu. | ○ | ○ |
| 2 | File link function | This function links the link source file and the link destination file and then register an Operation and Movement in order to verify the link source file.  If the link source file gets updated, the link destination file will be automatically updated. An Operation and Movement will be run to check the files. | ○ | ○ |

# System construction

The system construction for the CI/CD For IaC function is the same as the ITA system.

The following figure displays a system configuration where the Git repository is on its own server different to the CI/CD for IaC function. (A configuration where they're both on the same server is possible) Users can also link to a Git repository from GitHab and GitLab..

※ The construction figure below is simplified. Please refer to the following documents for more information.

・” System\_Configuration/Environment\_Guide\_Basic”

・” System\_Configuration/Environment\_Guide \_Ansible-driver“

・” System\_Configuration/Environment\_Guide \_Terraform-driver“

・” System\_Configuration/Environment\_Guide \_Terraform-CLI-driver“

**Act/Act construction**

**Exastro ITA  
(Web/AP function)**

**Ext. storage**

Link drivers

Session files

Upload files   
(Playbooks, etc.)

Data relay storage

(IN/OUT)

Temporary file

DB file

**Git link function**

**File link function**

**Act/Stb construction**

**Apatch**

**PHP**

**・・・**

Backyardサーバ

**PHP**

**Git link function**

**File link function**

Backyard server

**Web/AP server**

**Exastro ITA  
(Backyard function)**

**Git**

Git local clone

**Exastro ITA  
(Web/AP function)**

Git server

**Git link function**

Git function

DBMSサーバ

MariaDB

DBMS server

MariaDB

**File link function**

**Apatch**

**PHP**

**Web/AP server**

**Act/Stb construction**

**Act/Stb construction**

# System requirements

The system requirements for the CI/CD For IaC function is as follows. As the system requirements are based on the ones for ITA, please refer to the following document.

* Git package

**Table 4-1　Git package system requirements**

|  |  |  |
| --- | --- | --- |
| **Package** | **Version** | **Remarks** |
| Git | 1.8.3.1(RHEL7 type)  2.27.0 (RHEL8 type) | These versions are verified versions. |