

# FlexDeploy for MuleSoft



## DevOps tooling for managing MuleSoft deployment and release processes

### The Challenge

MuleSoft is a rapidly growing company helping “organizations change how they connect their data and applications to adapt to rapidly evolving digital landscapes.” In fact, leading companies in every industry are utilizing the MuleSoft platform to cut development time, increase productivity, lower integration costs, and increase customer satisfaction. Unfortunately, nothing is perfect, and managing MuleSoft deployments manually or via scripts can be complex, error-prone, and time consuming.

The MuleSoft Anypoint Platform provides flexibility and choice for deployments across on-premises and cloud implementations; CloudHub, Anypoint Runtime, and Standalone Enterprise. Handling MuleSoft application deployments is not the same across servers, and managing the properties across environments can be a challenge. When changing properties, it can be difficult to tell which applications need to be re-deployed, and there isn't clear visibility to what has been deployed, where, when, and by who. As customers evolve their MuleSoft subscriptions from On-Premises to Cloud or implement a hybrid model, the power of flexibility and choice can be offset by the difficulties managing the environments.

### The Solution

Adding to the frustration of managing these administration activities, there is minimal support for MuleSoft across commercial DevOps and Application Release Automation tools, meaning developers have few options to move away from manual and scripted activities that can be the cause of many headaches. No more! FlexDeploy has extensive support for MuleSoft, adding automation, controls, and visibility to MuleSoft implementations.

Deploying and managing MuleSoft applications and domains with FlexDeploy leverages comprehensive environment/property management and workflow orchestration to automate deployment and server management activities. FlexDeploy provides the controls and visibility required to effectively develop within and administer MuleSoft implementations across on-premises, cloud, and hybrid architectures. Using FlexDeploy for MuleSoft increases productivity, speed, and quality, while reducing the cost and risk associated with implementing and maintaining MuleSoft based solutions. FlexDeploy's support for MuleSoft can be categorized across the broad areas of automation, controls, and visibility.

### Automation

- Environment Modeling and Property Management
- Integration with SCM's such as SubVersion, Git, TFS, Perforce, and ClearCase
- Deploying Applications to Anypoint Runtime Manager Server/Cluster/Group
- Deploying Applications to Standalone Enterprise Server/Cluster
- Deploying Applications using Runtime Agent
- Stop cloud applications when not needed, improving resource utilization
- Easily configurable to manage Mule Application sizing requirements on CloudHub

## Controls

- Manage segregation of duties via role-based security
- Scheduling options to manage when and where changes can be made
- Implement Approvals in controlled environments
- Meet compliance and other change management policies with ease
- Configure change/maintenance windows for more controlled environments

## Visibility

- Dashboards and Reports for complete visibility across environments
- Real time and historical information to know the what/where/when/who of all changes, helping ease troubleshooting and make compliance and audit requirements a snap
- Notifications Framework for visibility and proactive action where needed

## Before and After FlexDeploy

Before FlexDeploy	After FlexDeploy
Complex, slow, and error prone manual and scripted processes result in higher cost and risk, environment outages, and a lack of repeatability.	Standardized processes and tooling decrease the complexity of managing and executing changes and improves the collaboration across all teams.
High degree of manual activities and scripting, increasing the time to delivery and reducing quality of initial delivery and ongoing maintenance.	Automation allows for faster release delivery and feedback cycles, increasing the positive business impact and relationship with end users.
Lack of visibility to what versions of middleware and applications are in each environment, when changes are made, who made the changes, etc., resulting in time consulting controls/audits and difficult troubleshooting when errors occur.	Visibility to real time and historical data associated with the software delivery lifecycle, improving planning and execution and increasing continuous improvement and compliance to controls/audit.
Lack of standard processes and tools, impacting the collaboration across teams.	High degree of automation, increasing the quality and speed of change; skilled professionals spend more time on high value activities.

The FlexDeploy DevOps platform makes it easy to establish repeatable and efficient processes for MuleSoft implementations, including extensive automation, improved controls and repeatability, and visibility like you've never had before. FlexDeploy provides a comprehensive and integrated solution across Build, Deploy, and Release Automation.

## MuleSoft Plugin Overview

**Versions Supported** - 3.6+ (running on-premises or in the cloud)

### Plugin Operations

- Build, Deploy, UnDeploy
- Create or Update ARM Cluster
- Stop Application, Start Application, Restart Application, Test Application
- Create Server, Remove Server, Start Server, Stop Server, Restart Server
- Add Server to Standalone Cluster, Remove Server from Standalone Cluster