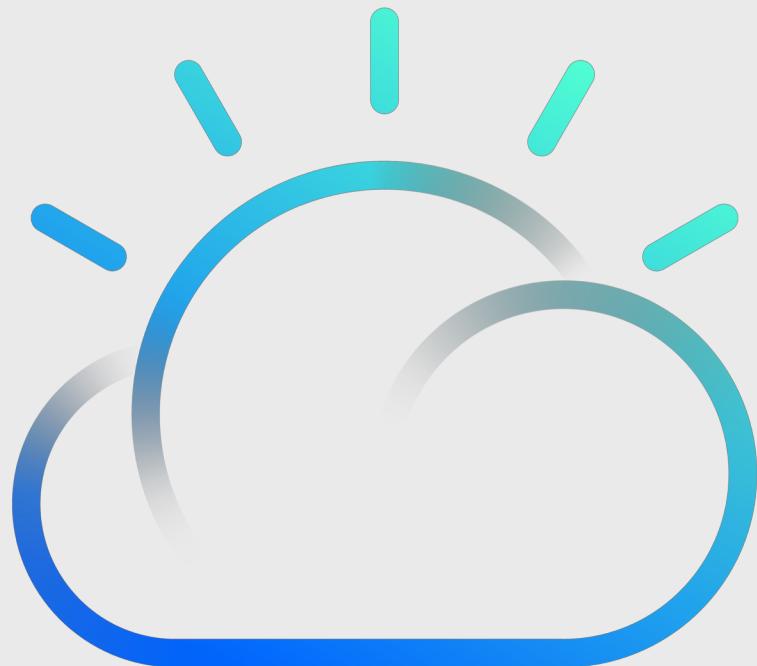


Microclimate

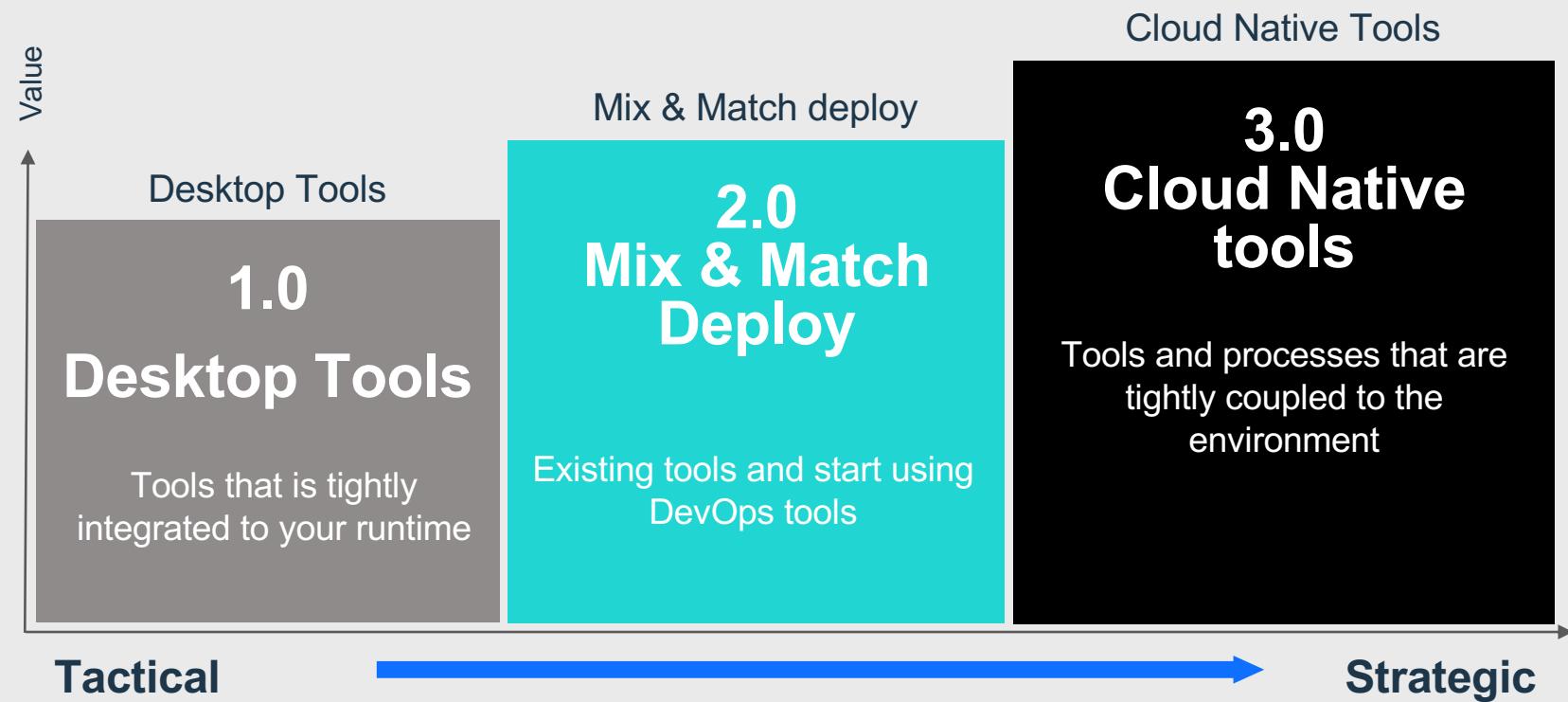
Overview and Strategy

IBM



IBM Cloud

The cloud has evolved as the technology for transformation



Multi-cloud is the key to organizational agility

8 out of 10 committing to Multi-Cloud

71% use 3 or more clouds



Getting new value from
third parties

Extracting value from
your entire business

Need tools that take advantage of the cloud
platform

<https://microclimate-dev2ops.github.io/>

Microclimate Projects

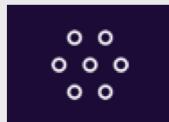
Welcome to Microclimate

Ready for a fast, incremental, intelligent, end-to-end development experience that puts you in charge? Create a new project to get started!



New project Import project

Microclimate - an end to end development platform to develop, build, test and deploy code



Choice with consistency



Hybrid integration



DevOps productivity



Powerful, accessible data and analytics



Cognitive solutions

Get started quickly with choice of programming languages

Fast development cycle to develop, build, test to maximize team agility

Integrated DevOps experience that supports deployment to IBM Cloud Private

Seamless Experience

Regardless of where your development experience started, you get a single, seamless experience.

Key use cases

1

Simplify the creation
and deployment of
microservices

2

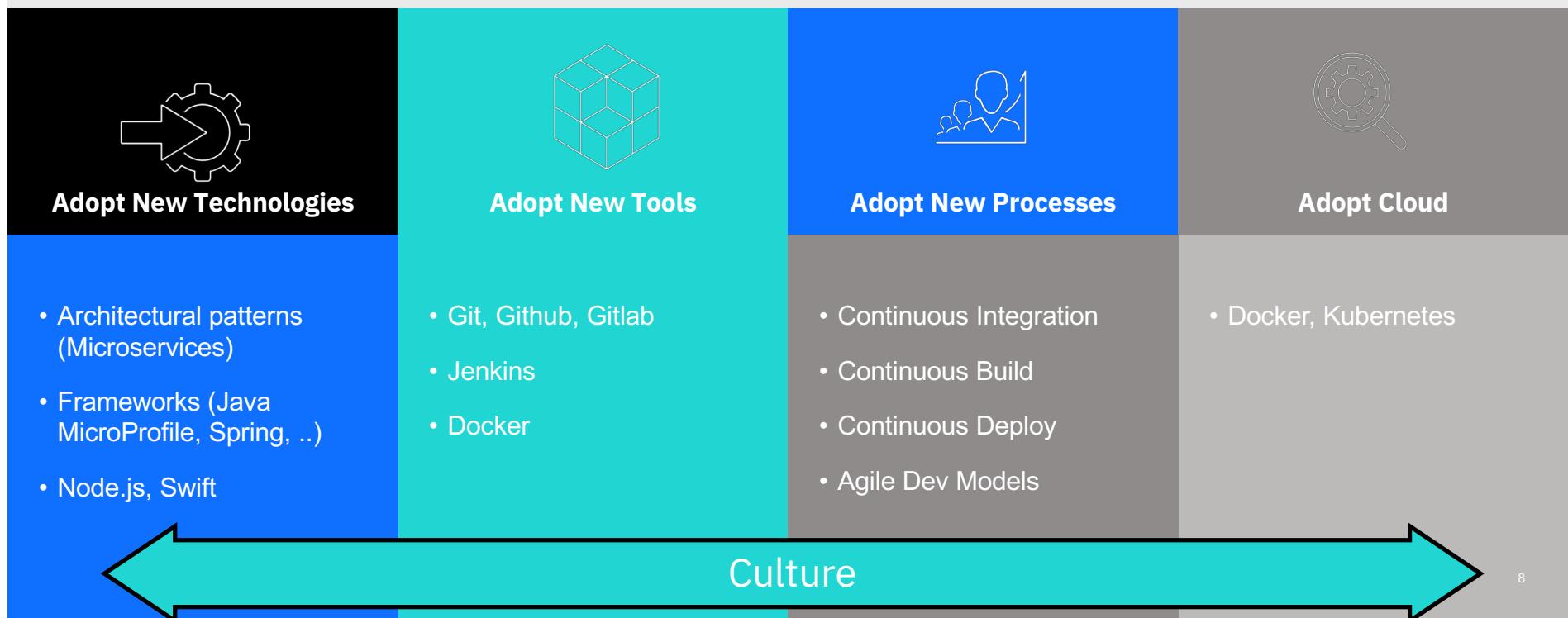
Modernize and
optimize existing
applications

3

Embrace new
programming practices
such as agile and
DevOps



Microclimate supports your entry point for transformation:



Built with open standards, to support developer choice



Support for popular Java stacks including Java EE/MicroProfile and Spring

Java



Multiple language support for Node and Swift

Polyglot



Speed and agility with safety using integrated DevOps

Pipeline



Manage containers at scale

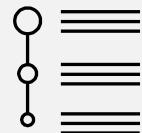
Containers

Solution overview



Quick start samples and import capability

Get started quickly and stay on pace



Rapid iteration

Quickly enhance, build and test

Intelligent feedback and diagnostics

Fast development with real time feedback

Integrated DevOps pipeline

Get into production fast with a preconfigured DevOps pipeline



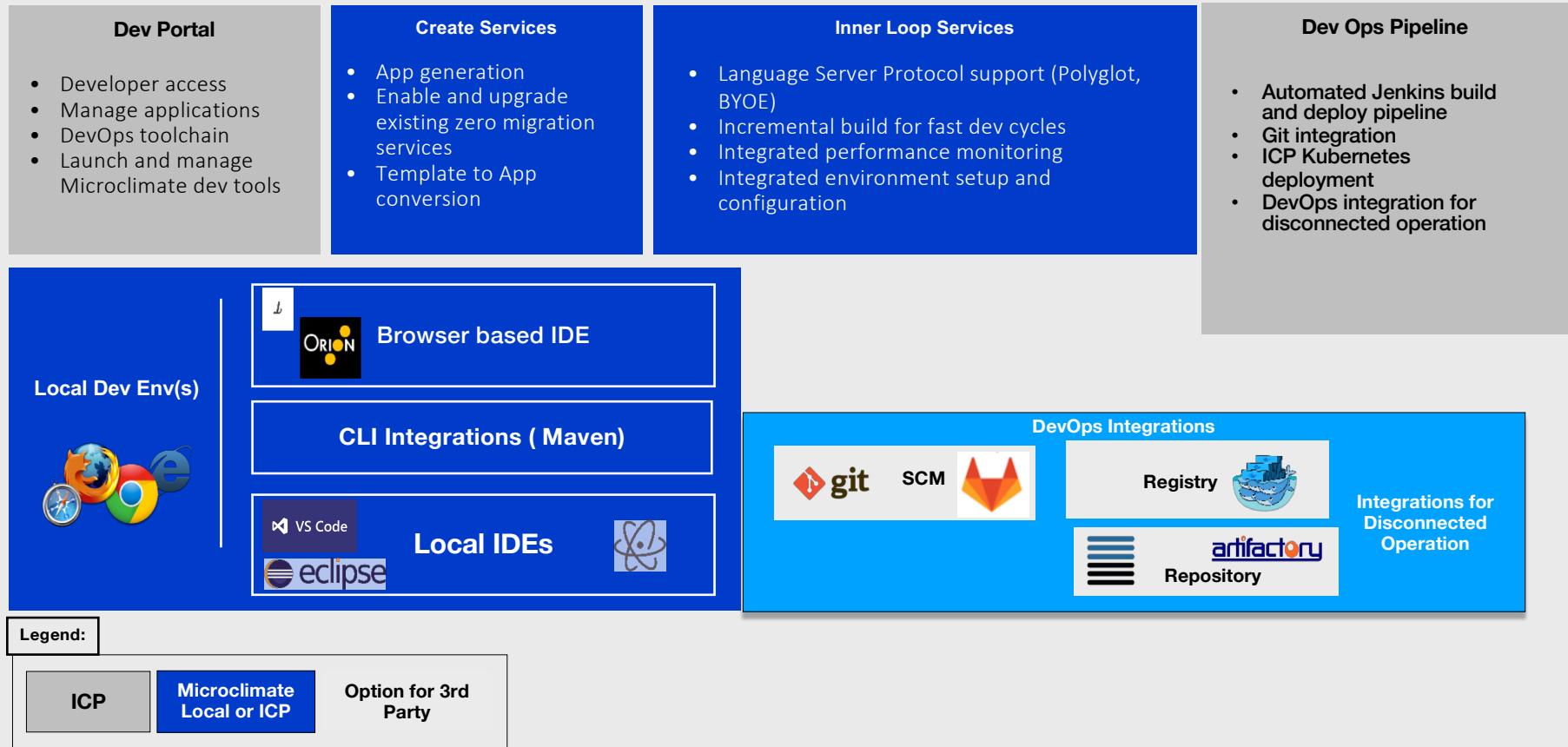
Free download to run locally or on IBM Cloud Private



Strategic Value:

Integration with IBM Cloud Private gives you an integrated developer platform for developing, building, testing, deploying code

Microclimate scope



Different ways to begin

Create new cloud native applications using:

- Java (MicroProfile, Spring Cloud)
- Node
- Swift

OR

Import an existing service from:

- Git repository
- Local disk
- Archive

The screenshot displays two panels of the Microclimate application interface. The top panel, titled 'Projects', shows two existing projects: 'nodeapp' (Language: node) and 'test1' (Language: node). A search bar is at the top right. The bottom panel, titled 'Import project', has a 'Select location' section with three options: 'GitHub' (selected), 'Local project', and 'Project archive'. It includes input fields for each and a 'Select project folder' or 'Select archive file' button. At the bottom are 'Cancel' and 'Next' buttons.

Rapid onboarding and app creation

The screenshot shows the Microclimate web interface under the 'Projects' tab. It displays a list of available project languages: Java (.java), JavaScript (.js), and Swift (.swift). A search bar is at the top right. Below the language icons is a text input field labeled 'Project name:' and two buttons: 'Next' and 'Cancel'.

Hosted on ICP, containerized install, or command line tools



© 2018 IBM Corporation

Web-based IDE supporting full lifecycle or BYOE

The screenshot shows the Microclimate web IDE. It features a code editor window with Node.js code for a 'nodeapp' project. To the left is a sidebar with 'Microclimate' and 'Projects' tabs, and icons for 'Open app', 'App logo', 'App monitor', and 'DS_Store'. On the right, there are sections for 'App logs' and 'App metrics'.

Included web IDE or bring your own



Powered by

Language Server Protocol (LSP)

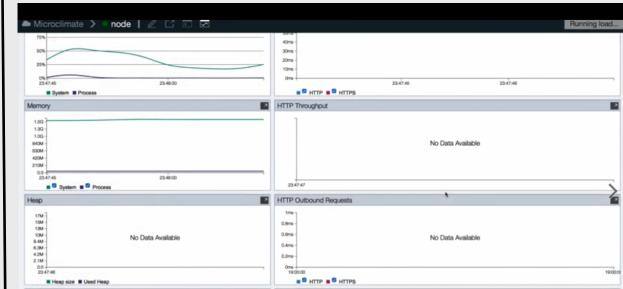
Edit

Rapid Dev Cycle (Inner Loop)

Test

Compile

Instant monitoring and feedback



Consistent tools from dev to ops

Language server protocols

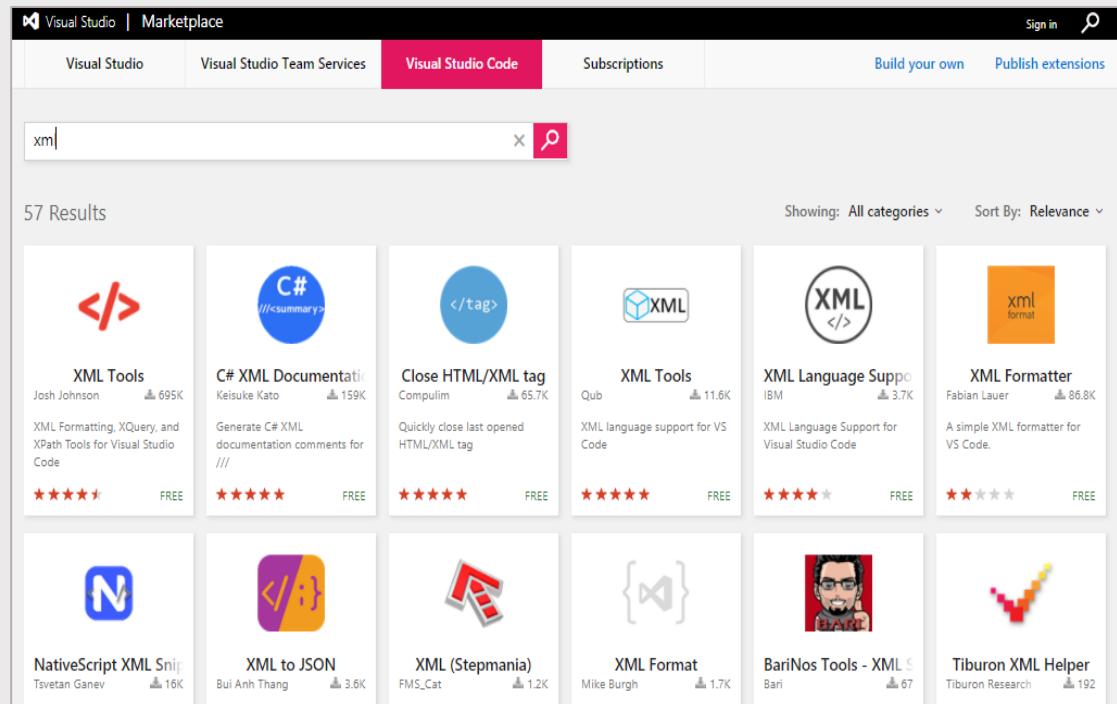
Language Server Protocol (LSP) provides for language services with an uplift to cognitive capabilities on cloud for supporting editors.

1

The Language Server Protocol allows for decoupling language services from the editor so services may be contained within a general purpose *language server*.

2

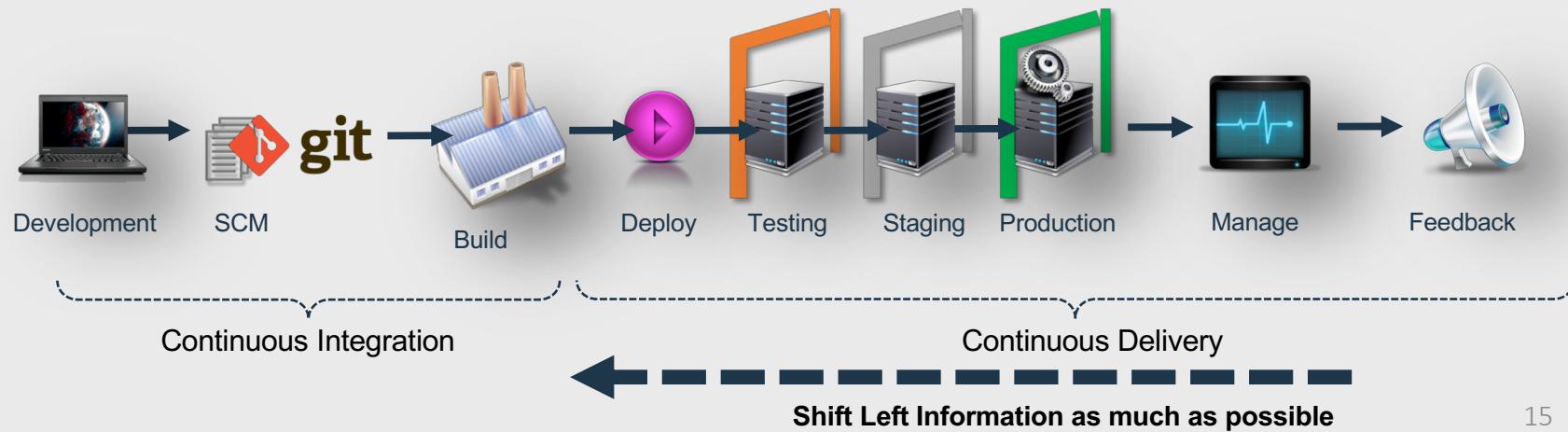
Any editor can inherit sophisticated support for many different languages by making use of existing language servers.



Dev-Ops-Dev-Ops-Dev...

Innovate and improve client experience by speeding the customer feedback loop by being agile.

Flow information back to development by bringing ops information back to dev allowing the team to work on constant improvement.



Microclimate DevOps Pipeline

nodeproject •

Wait a second... there isn't a pipeline setup yet.
We should probably take care of that.

Create pipeline

App logs

App monitor

Pipeline

Easily create a new pipeline in Microclimate by providing the repository location and the necessary credentials.

nodeproject •

Create pipeline

Repository location
`https://github.com/user/test`

Authentication required

User
username

Password

Auto-build i
Automatically trigger the build whenever code changes are pushed to the repository.

Off — On

Create pipeline

Microclimate – Part of the solution to accelerate modernization

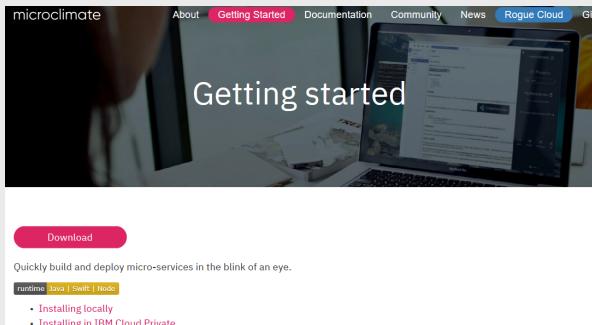
The image displays four screenshots of IBM tools, each with a title and a brief description below it:

- Microclimate**
End-to-End development experience
- Transformation Advisor**
Assess and plan
Prescriptive guidance
- Cloud Automation Manager**
Multi-cloud provisioning and management
- IBM Cloud Garage**
Best practices
Reference architectures

Microclimate – Get started

Via home page

<https://microclimate-dev2ops.github.io/gettingstarted>

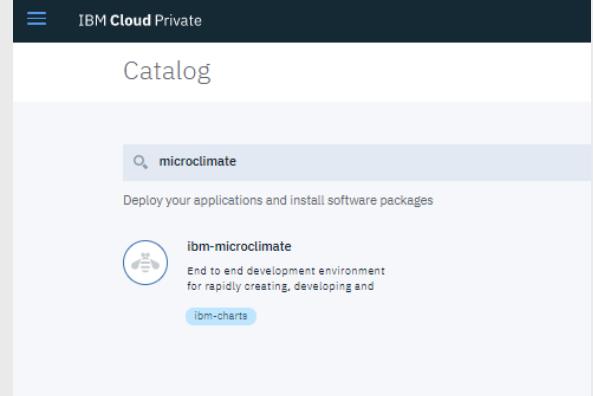


Freely Available

1. Download from Microclimate home page to run locally (ILAN license)
2. Install into IBM Cloud Private from the ICP Catalog (supported with ICP license)

Use with IBM Cloud Private Community Edition

Via IBM Cloud Private Catalog



Resources

Resources

Home Page

- Microclimate overview
- Introductory videos
- Documentation

<http://ibm.biz/dev2ops>

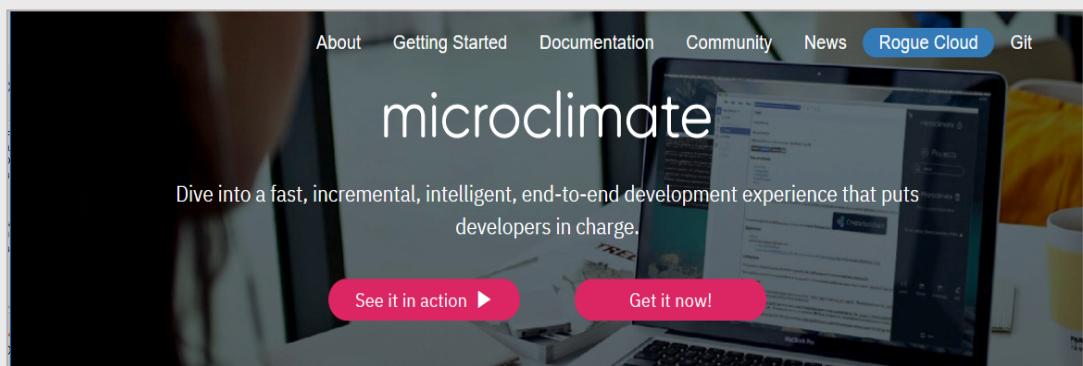
Rogue Cloud Game

- Rogue Cloud overview
- Introduces Microclimate through a game experience
- Documentation



[External Slack Channel](#)

IBM Cloud / © 2018 IBM Corporation



The screenshot shows the Microclimate landing page. At the top, there's a navigation bar with links: About, Getting Started, Documentation, Community, News, **Rogue Cloud** (which is highlighted with a blue background), and Git. Below the navigation is a large image of a person working at a desk with multiple monitors displaying code and development tools. Overlaid on the image is the word "microclimate" in a large, white, sans-serif font. Below this, a subtitle reads: "Dive into a fast, incremental, intelligent, end-to-end development experience that puts developers in charge." Two pink call-to-action buttons are visible: "See it in action ▶" and "Get it now!"

Microclimate is an end to end development environment that lets you rapidly create, edit, and deploy applications. Applications are run in [containers](#) from day one and can be delivered into production on [Kubernetes](#) through an automated DevOps pipeline using [Jenkins](#). Microclimate can be installed locally or on [IBM Cloud Private](#).



The screenshot shows the Rogue Cloud game interface. The title "ROGUE CLOUD" is prominently displayed in gold letters, with the subtitle "CODE TO CONQUER. CODE TO SURVIVE." underneath. The background features a pixelated landscape with clouds, a chest of gold coins, and a character icon. A large double-headed arrow icon is centered below the title.

How sharp are your coding skills? Do you consider yourself a master strategist? Are you willing to bet your character's life on it? Welcome to Rogue Cloud, our homage to the old school [roguelike](#) games. We spared you the monochrome graphics, but kept to tradition by creating an open-world, turn based world crawler complete with a top-down 2D multiplayer experience. However unlike a traditional game, where you get the luxury of a controller, keyboard, or mouse, with Rogue Cloud, you are writing code to ensure your character's success...and survival, in a dangerous world.

