SuperMap iCloudManager 8C Introduction

Product Introduction

For the current users of cloud computation platform, deploying GIS business environment and maintenance is very inconvenient. How to construct GIS servers? How to construct environment? How to configure node cluster? How to construct cloud GIS platform for the users transforming from current service GIS to cloud GIS? How to conveniently deploy and manage cloud GIS platform? How to intensively utilize calculation resource? This is what iCloudManager for. iCloudManager can deploy in cloud calculation platform, maintenance GIS business, construct cloud GIS environment.

Potential Users for iCloudManager

- GIS sharing platform organizations in construction industry.
- Organizations already have cloud calculation platform, but still deploy, maintenance in old mode.
- Organizations already have service GIS, transforming to cloud GIS.

In cloud platform, iCloudManager makes SuperMap GIS 8C more connected, more intelligent internally, more convenient to deploy/maintenance, they form SuperMap cloud GIS solutions.

The figure below illustrates how iCloudManager constructs cloud GIS. iCloudManager locates at upper layer of IaaS cloud platform, realizing GIS environment intelligently deploying and maintaining through packaging IaaS cloud platform API. Different from traditional IaaS managers, iCloudManager can directly provide GIS business environment. After integrating with industrial solution, it can directly provide SaaS cloud services.
iCloudManager can fully utilize resource like basic GIS data, CPU, memory, network, etc. in IT resource center through IaaS API deployment, GIS environment maintenance like GIS portal environment, mapping environment, tiling environment, GIS function service environment. Can fully utilize existed hardware resource by multi-tenancy technology.
environments provided by iCloudManager, running GIS business through GIS environment.

With the development of GIS applications, iCloudManager forms a comprehensive GIS center for final users to map, integrate and find GIS resources and improved GIS services.

Product Features

Easier to deploy and manage cloud GIS platform

In iCloudManager, deploying GIS business becomes easier. Taking GIS cluster as an example, constructing a GIS cluster needs allocating machines, installing operation system, copying iServer package, installing drives/configure licenses, logging in every iServer to configure cluster, deploying and updating business data, complicated process, long circle. Especially for deploying Linux GIS cluster, there could be different accidents for users due to the unfamiliarity of Linux.

In iCloudManager, users only need to click “add GIS cluster” button, input node number, then the GIS cluster can be constructed. In addition, clicking one button not only creates GIS cluster, but also environments for GIS portal, GIS desktop, GIS industrial applications.

Easier to monitor cloud GIS system

In iCloudManager, all the machines, GIS application status can be handled at the same place
After the construction of iCloudManager, administrators can log in iCloudmanager and enter administration interface to check the statistics information, like host machine utilization, loading status, node utilization status, important warning messages and pending items. Administrators also have other administration authorities, like GIS node management, GIS template management, GIS data management, mission management, user management and IP management.

Shown as the picture below, all the deployment of GIS business environment and running status can be checked by monitoring page: grey means machine crashes; moving mouse can see the server status of GIS server, green means operating smoothly, red means alarm for GIS servers.

![Monitoring and alarming](image)

**Intelligent distribution of cloud resource**

Flexible stretch, accordingly distribution, resource integration are the important features of cloud calculation, but only relying on cloud calculation isn’t sufficient for platform to make applications. iCloudManager combines cloud calculation platform with GIS servers (iServer), realizing VM level flexible stretch, integrating calculation resources. When GIS cluster loading rises, iCloudManager will dynamically add nodes; when loading decreases, iCloudManager will dynamically decreases, releasing calculation resource.