

SuperMap iClient for JavaScript Getting Started —Leaflet

SuperMap Software Co., Ltd.



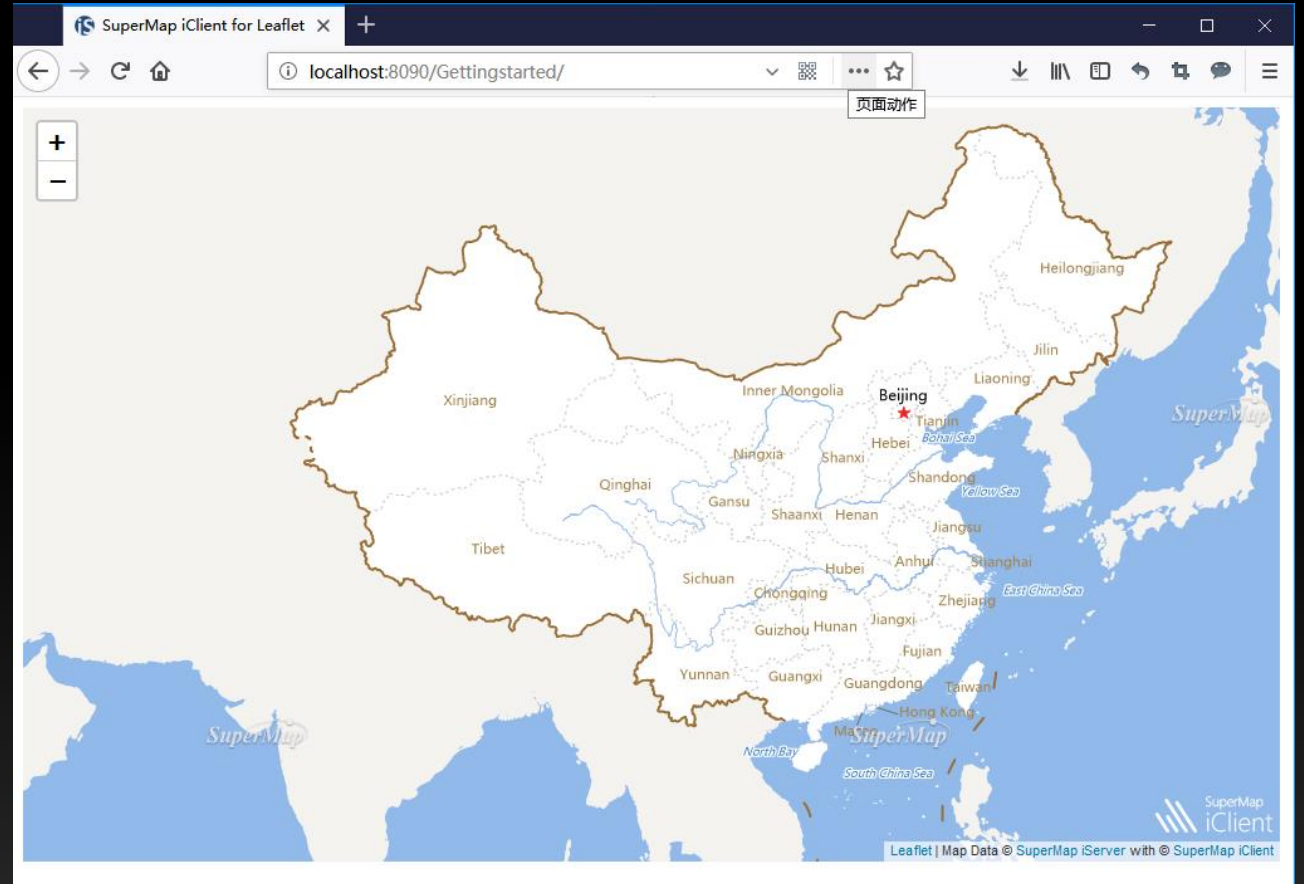
Contents

- Publish GIS data through the internet as a service and browse the service at the client side

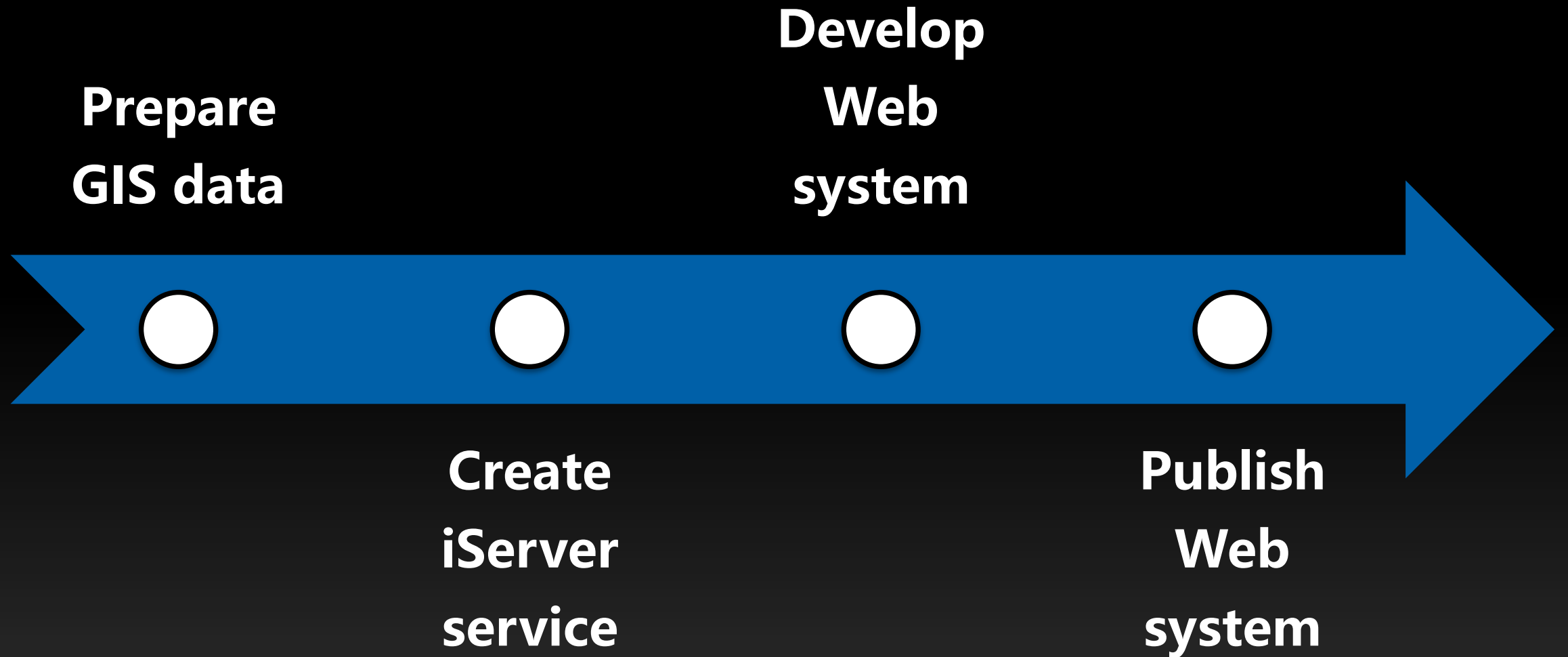
Note: “SuperMap iClient for JavaScript” is abbreviated as “JS” in the course

System Target

- Publish a web system
 - Functions: Browse a map

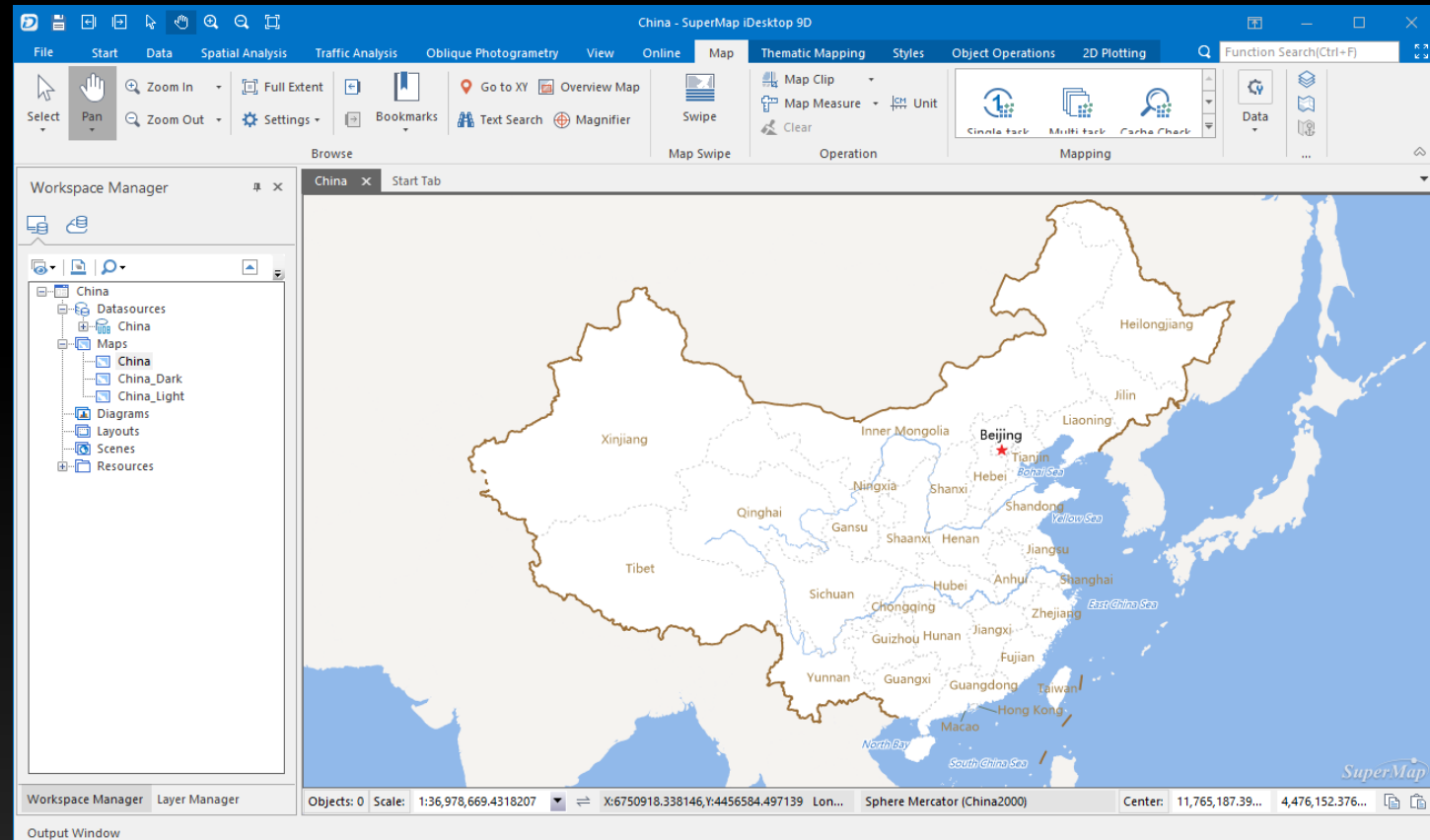


Steps



Step 1: Prepare GIS Data

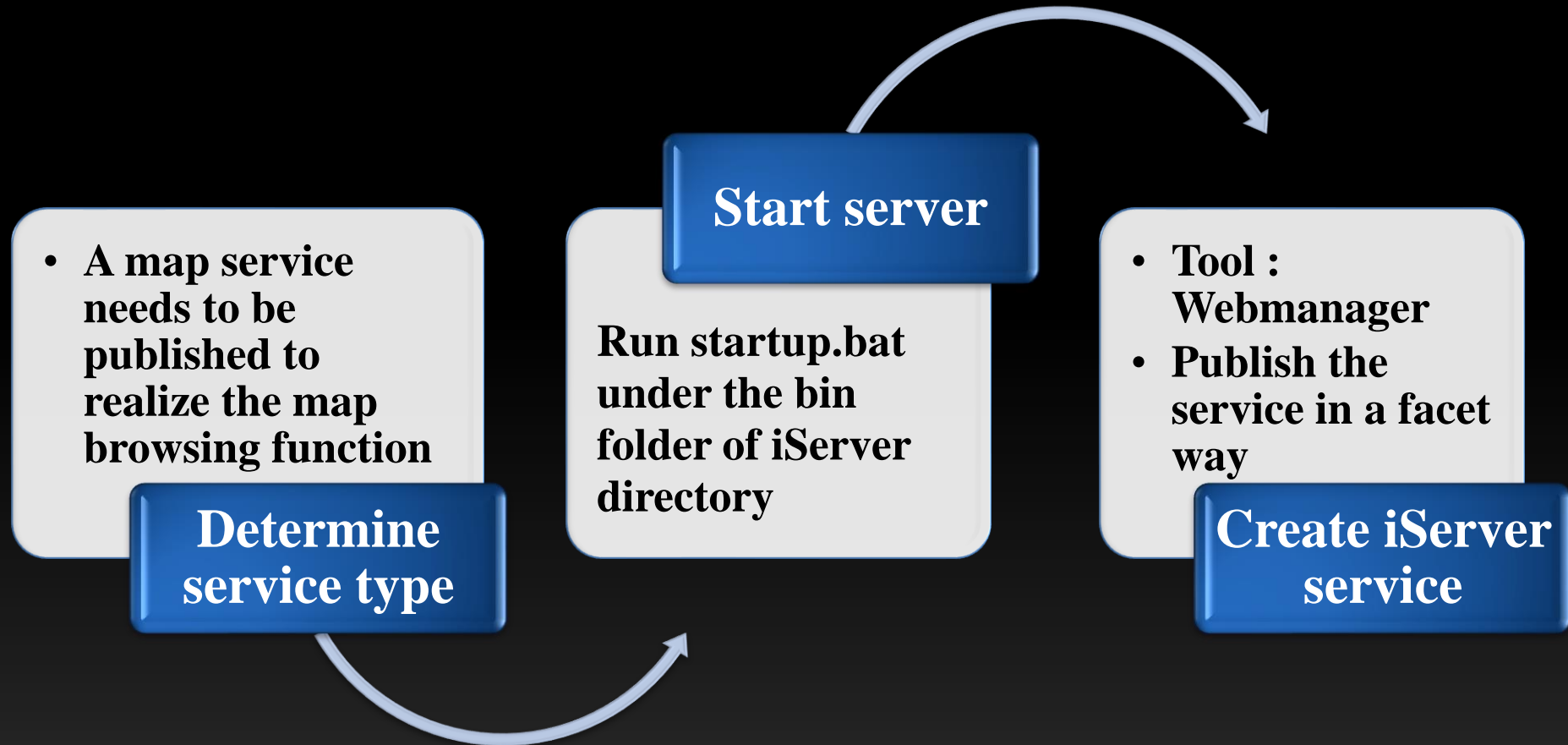
- Prepare GIS data with SuperMap iDesktop
 - Map: World



Note: Sample data of iServer-- China.smwu is used in this course

Step 2: Create iServer Service

- Contents



Step 2: Create iServer Service

- Start iServer
 - Method 1: Run startup.bat under the bin folder
 - Method 2: Start > Programs > SuperMap > SuperMap iServer > Start iServer Service

```
iServer D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip
11-Jan-2018 11:32:01.876 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDescriptor Deploying
configuration descriptor [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\conf\Catalina\localhost\RealspaceSample.x
ml]
11-Jan-2018 11:32:01.892 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDescriptor Deployment
of configuration descriptor [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\conf\Catalina\localhost\RealspaceSamp
le.xml] has finished in [16] ms
11-Jan-2018 11:32:01.892 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDescriptor Deploying
configuration descriptor [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\conf\Catalina\localhost\SuperMapRealspace
.xml]
11-Jan-2018 11:32:01.892 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDescriptor Deployment
of configuration descriptor [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\conf\Catalina\localhost\SuperMapReals
pace.xml] has finished in [0] ms
11-Jan-2018 11:32:01.892 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying w
eb application directory [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\webapps\iserver]
11-Jan-2018 11:32:12.358 信息 [localhost-startStop-1] org.apache.jasper.servlet.TldScanner.scanJars At least one JAR was
scanned for TLDs yet contained no TLDs. Enable debug logging for this logger for a complete list of JARs that were scan
ned but no TLDs were found in them. Skipping unneeded JARs during scanning can improve startup time and JSP compilation
time.
11-Jan-2018 11:32:39.341 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment
of web application directory [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\webapps\iserver] has finished in [37,
449] ms
11-Jan-2018 11:32:39.341 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deploying w
eb application directory [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\webapps\ROOT]
11-Jan-2018 11:32:39.356 信息 [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDirectory Deployment
of web application directory [D:\SuperMap\iServer\supermap-iserver-9.0.1-win64-zip\webapps\ROOT] has finished in [15] ms
11-Jan-2018 11:32:39.387 信息 [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-nio-8090"]
11-Jan-2018 11:32:39.387 信息 [main] org.apache.catalina.startup.Catalina.start Server startup in 38381 ms
```

Step 2: Create iServer Service

- <http://localhost:8090/iserver/manager/>

The screenshot displays the SuperMap iServer Manager web interface. The browser address bar shows `localhost:8090/iserver/manager`. The main navigation menu includes Home, Services, Clusters, Logs, Security, Monitoring, Backup, Task, License, and Settings. On the left sidebar, the 'Quickly publish services' button is highlighted with a red box and a red arrow pointing to a dialog box. The dialog box, titled 'Quickly publish service- Please select the data source', contains the text 'Data source can be workspace or standard remote service.' and a dropdown menu for 'Data source:' currently set to 'Workspace'. 'Next' and 'Cancel' buttons are at the bottom of the dialog. In the background, a 'Server performance' chart shows 0 requests/sec, and a 'Service access statistics' chart is partially visible. On the right side, a separate window titled 'Quickly publish service-Please select the service type' is open, listing various service types with checkboxes and dropdown menus.

Quickly publish service-Please select the service type

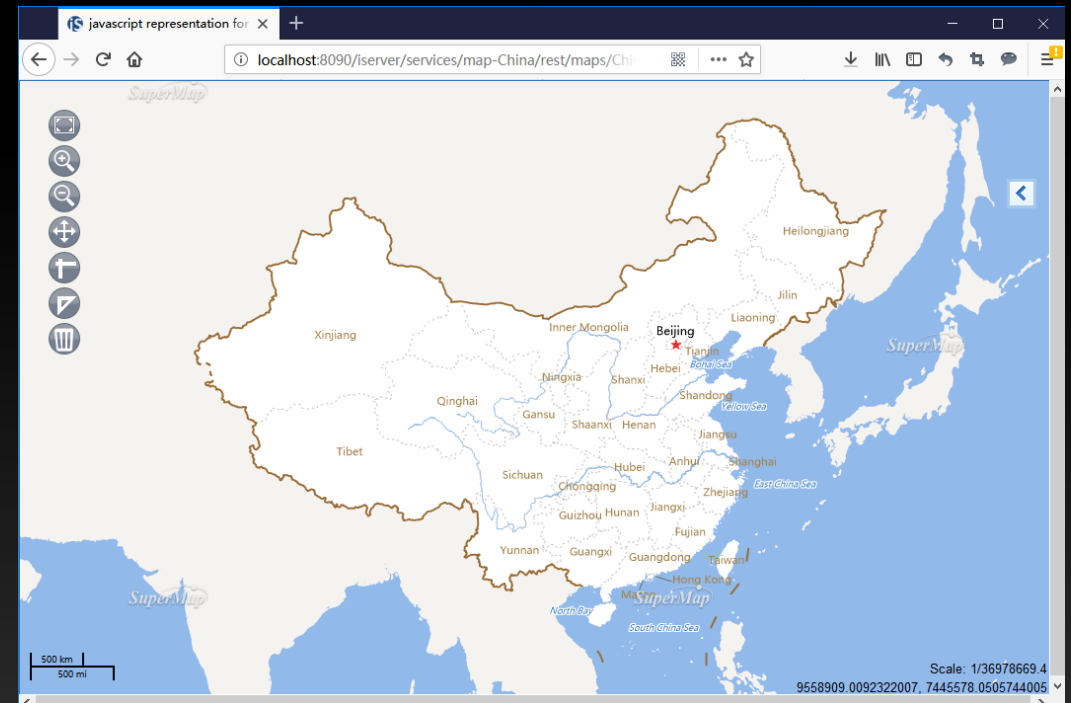
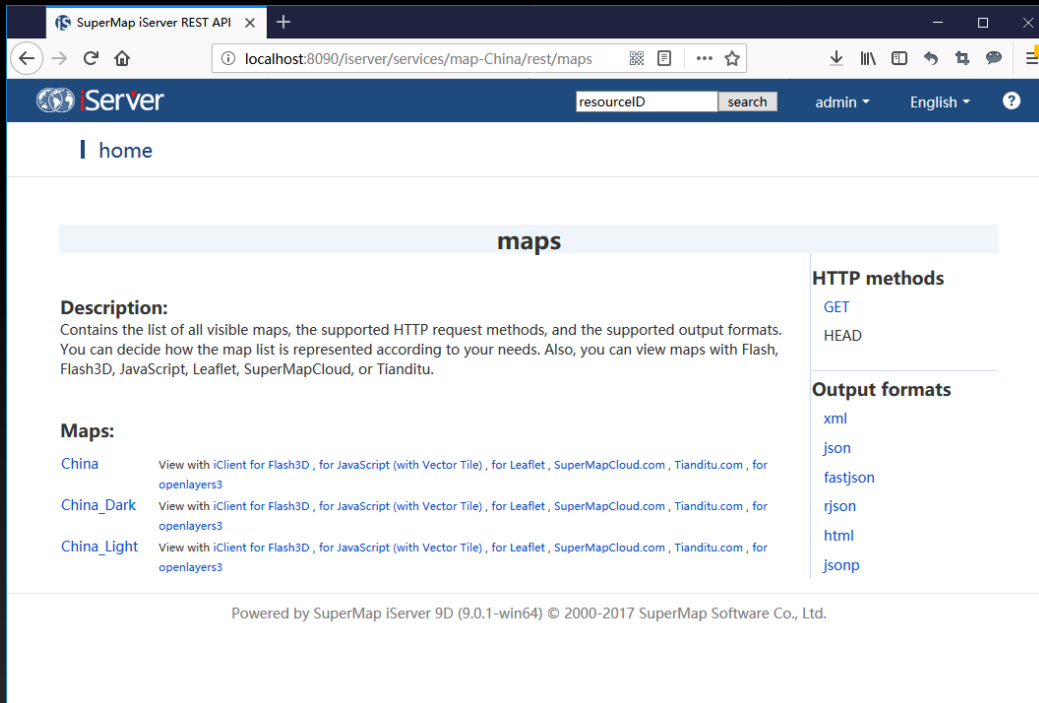
Service types supported by current data source (more than one can be selected).

- Select/Deselect
- REST Map Service
- REST Data Service
- REST 3D Service
- REST SpatialAnalyst Service
- REST TransportationAnalyst Service
- REST TrafficTransferAnalyst Service
- REST-NetworkAnalyst3D Service
- REST Address Match Service
- WMS1.1.1 Service
- WMS1.3.0 Service
- WMTS1.0.0 Service
- WMTS-China Service
- WFS1.0.0 Service
- WFS2.0.0 Service
- WCS1.1.1 Service
- WCS1.1.2 Service
- WPS1.0.0 Service
- ArcGIS REST Map Service
- ArcGIS REST Feature Service
- ArcGIS REST Network Analyst Service
- Baidu REST Map Service
- Google REST Map Service

Buttons: Back, Next, Cancel

Step 2: Test iServer Service

- Open Web browser
 - Map service address: `http://localhost:8090/iserver/services/map-China/rest/maps/China`

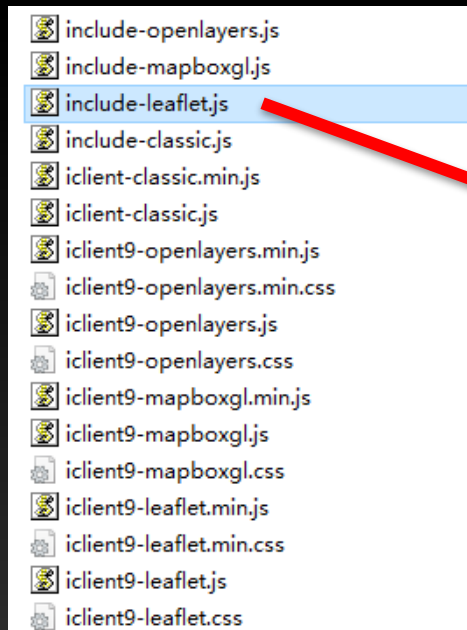


Step 3: Develop Web System

- Development Tool—SuperMap iClient
 - Libraries for the client GIS development tool
 - Acquire iServer services
 - Development tool for Web systems
- SuperMap iClient Location
 - [iServer installation directory]/iClient directory
- This example employes SuperMap iClient for JavaScript
 - SuperMap iClient for JavaScript product package
 - [iServer installation directory]/iclient/forJavaScript

Step 3: Copy Script Library Files

- Create the GettingStarted folder
- Copy script library files to the new folder
 - dist folder – Core library files for development frameworks
 - libs folder – Third-party technology libraries (under web folder)



```
35 function load() {
36     var includes = (targetScript.getAttribute('include'
37     ) || "").split(",");
38     var excludes = (targetScript.getAttribute('exclude'
39     ) || "").split(",");
40     if (!isArray(excludes, 'leaflet')) {
41         inputCSS("../..../web/libs/leaflet/leaflet.css");
42         inputScript("../..../web/libs/leaflet/leaflet.js"
43         );
44     }
45     if (isArray(includes, 'mapv')) {
46         inputScript("../..../web/libs/mapv/mapv.min.js");
47     }
48     if (isArray(includes, 'turf')) {
49         inputScript("../..../web/libs/turf/turf.min.js");
50     }
51 }
```

A screenshot of a code editor showing the contents of 'include-leaflet.js'. A red box highlights the code block that loads 'leaflet.js' if it is not excluded. A red arrow points from the 'libs folder' in the list above to this code block.

Step 3: Create an HTML Page

```
<html>  
  <head>  
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" >  
    <title>SuperMap iClient for JavaScript</title>  
  </head>  
  
  <body >  
  
  </body>  
</html>
```

Step 3: Add Script Library Reference

```
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" >
    <title>SuperMap iClient for JavaScript</title>
    <script src="dist/include-leaflet.js"></script>
  </head>
  <body>
  </body>
</html>
```

Step 3: Add DIV for Map Control

```
<html>
.....
<body onload=onPageLoad()>
    <div id="map" style="width:800px;height:500px;">
    </div>
</body>
</html>
```

Step 3: Create map object and set properties such as center, scale, etc.

```
<head>
.....
<script type="text/javascript">
  var map,layer,
  // Set GIS service address for browsing
  url = "http://localhost:8090/iserver/services/map-China/rest/maps/China";
  function onPageLoad() {
    // Cerate map object

map=L.map("mapDiv",{center:[0,0],maxZoom:18,zoom:2,crs:L.CRS.EPSG3857});

  }
</script>
</head>
```

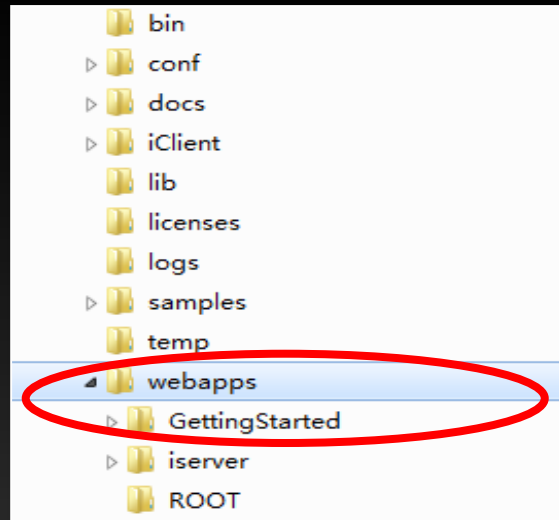
Step 3: Add iServer layer to Map

```
<head>
.....
<script type="text/javascript">
  var map,layer,
  // Set GIS service address for browsing
  url = "http://localhost:8090/iserver/services/map-China/rest/maps/China";
  function onPageLoad() {
    // Create map object

map=L.map("mapDiv",{center:[0,0],maxZoom:18,zoom:2,crs:L.CRS.EPSG3857});
    L.supermap.tiledMapLayer(url).addTo(map);
  }
</script>
</head>
```

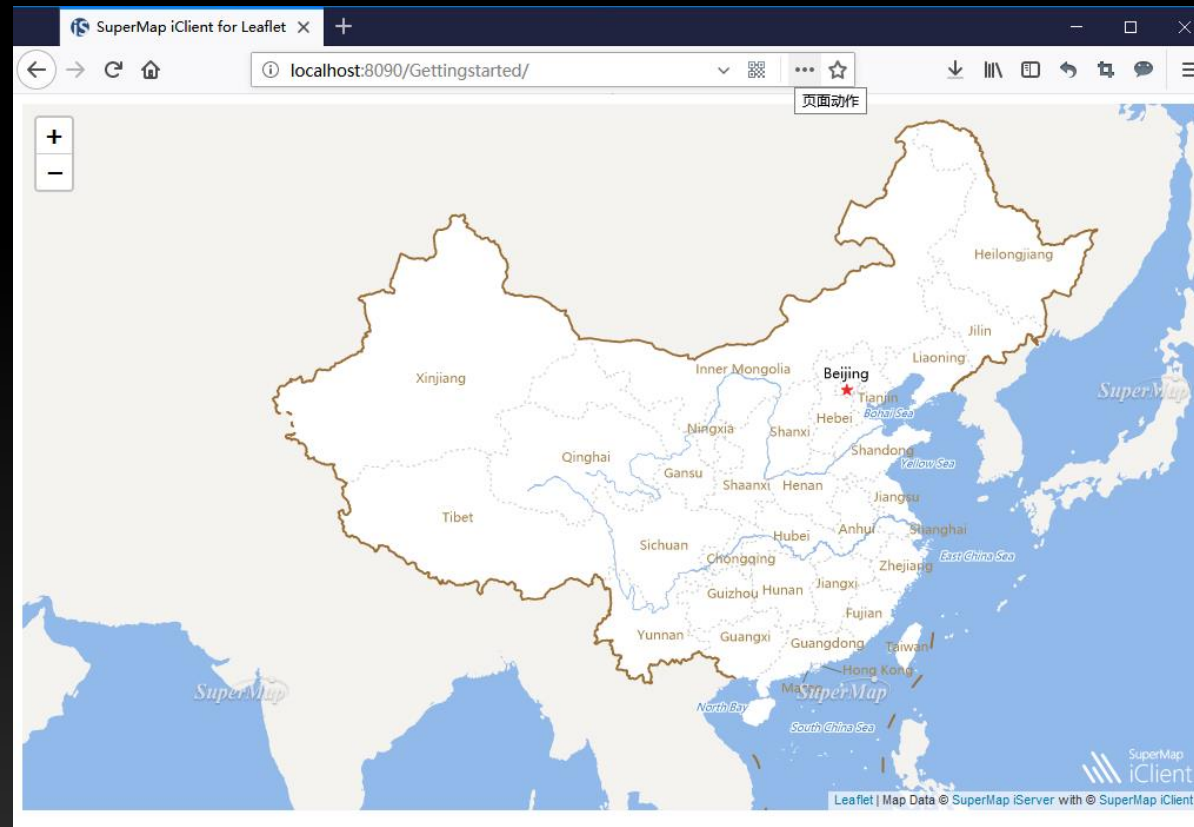

Step 4: Publish Web System

- System deployment and debugging (Tomcat)
 - Copy the GettingStarted folder to the webapps directory of Tomcat
 - Tomcat in SuperMap iServer is employed in this example
 - Copy the GettingStarted folder to [SuperMap iServer root directory]/webapps



Step 4: Publish Web System

- Browse for debugging <http://localhost:8090/GettingStarted/>



Thanks!

SuperMap

北京超图

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