

*SuperMap* 北京超图

SuperMap Software Co., Ltd.

# SuperMap iClient for JavaScript Getting Started —MapboxGL

SuperMap Software Co., Ltd.



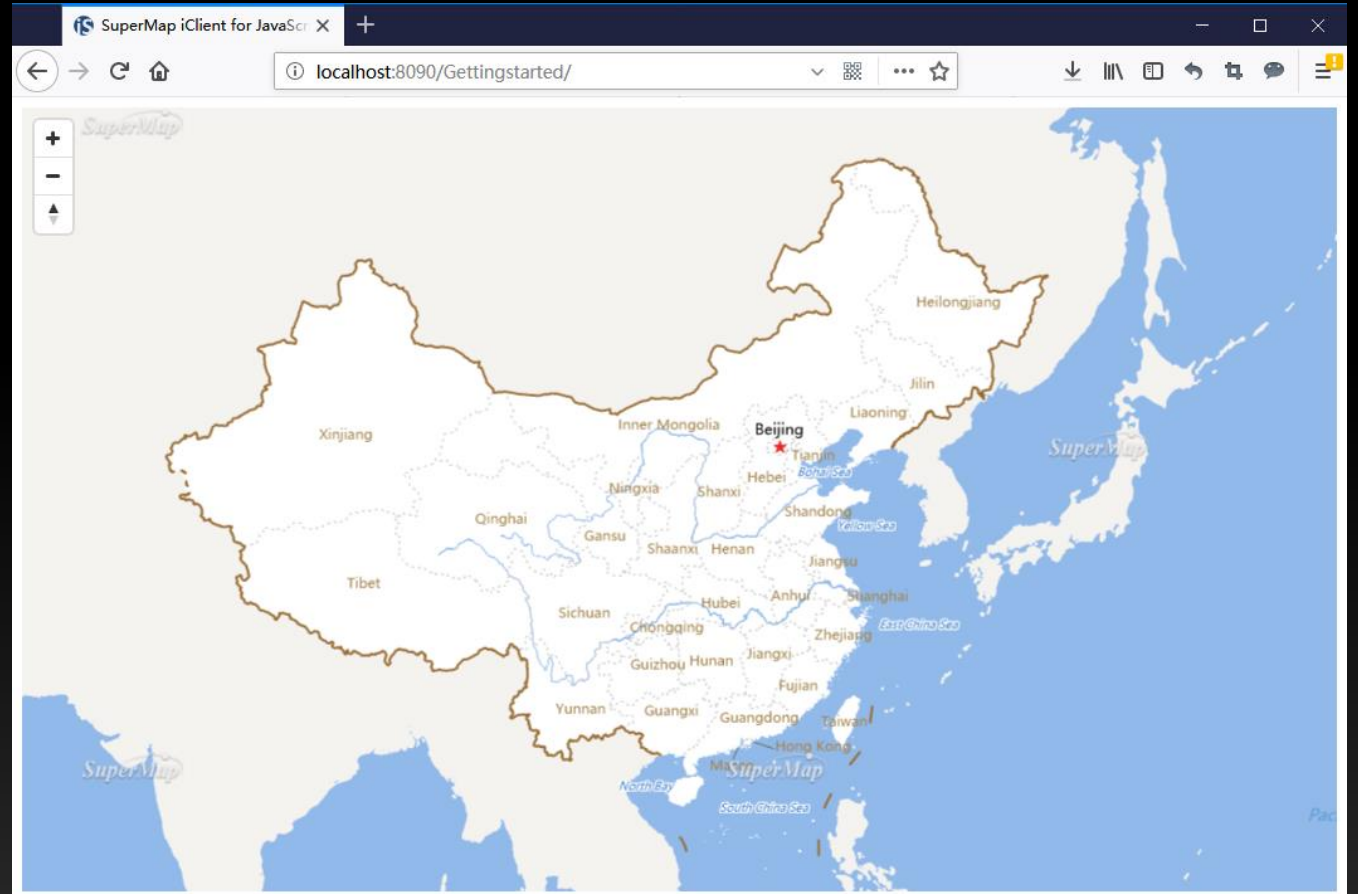
# Contents

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

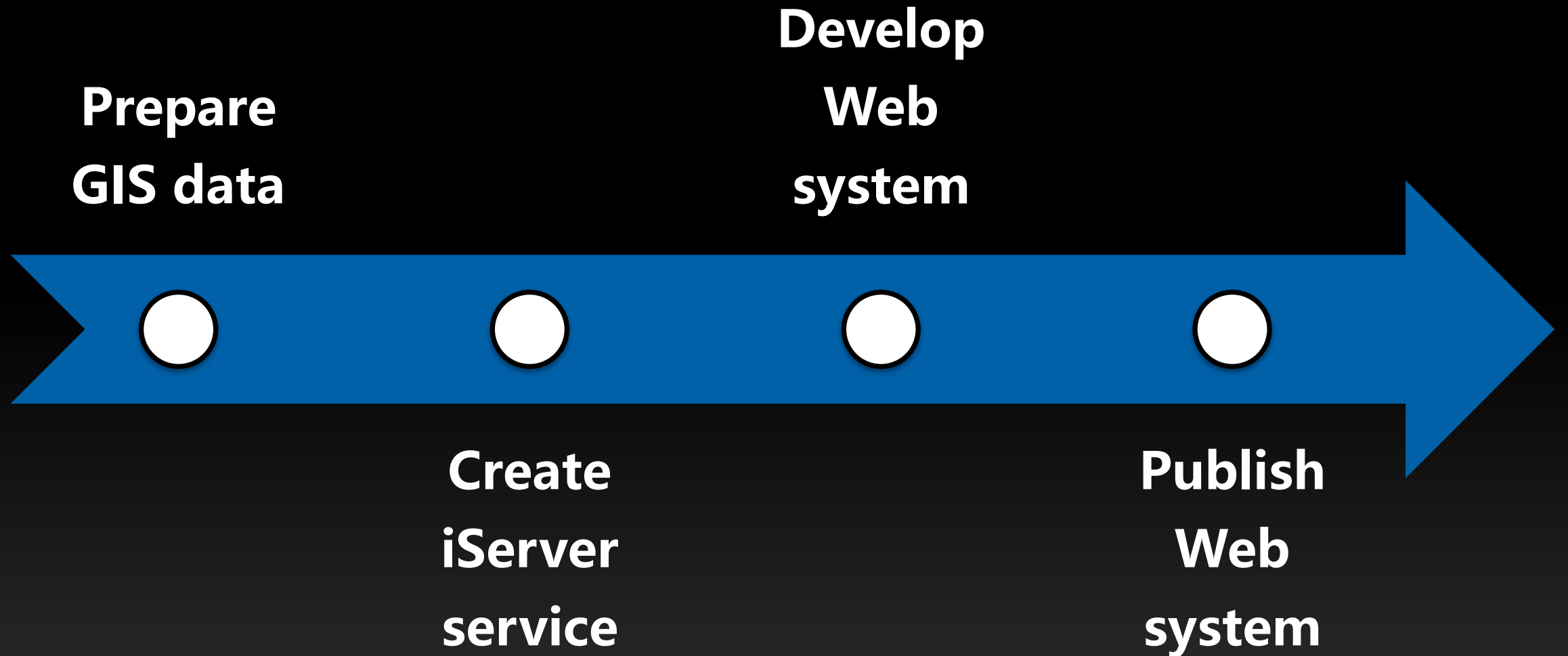
Note: “SuperMap iClient for JavaScript” is abbreviated as “JS” in the course

# System Target

- Publish a web system
  - Functions: Browse a map

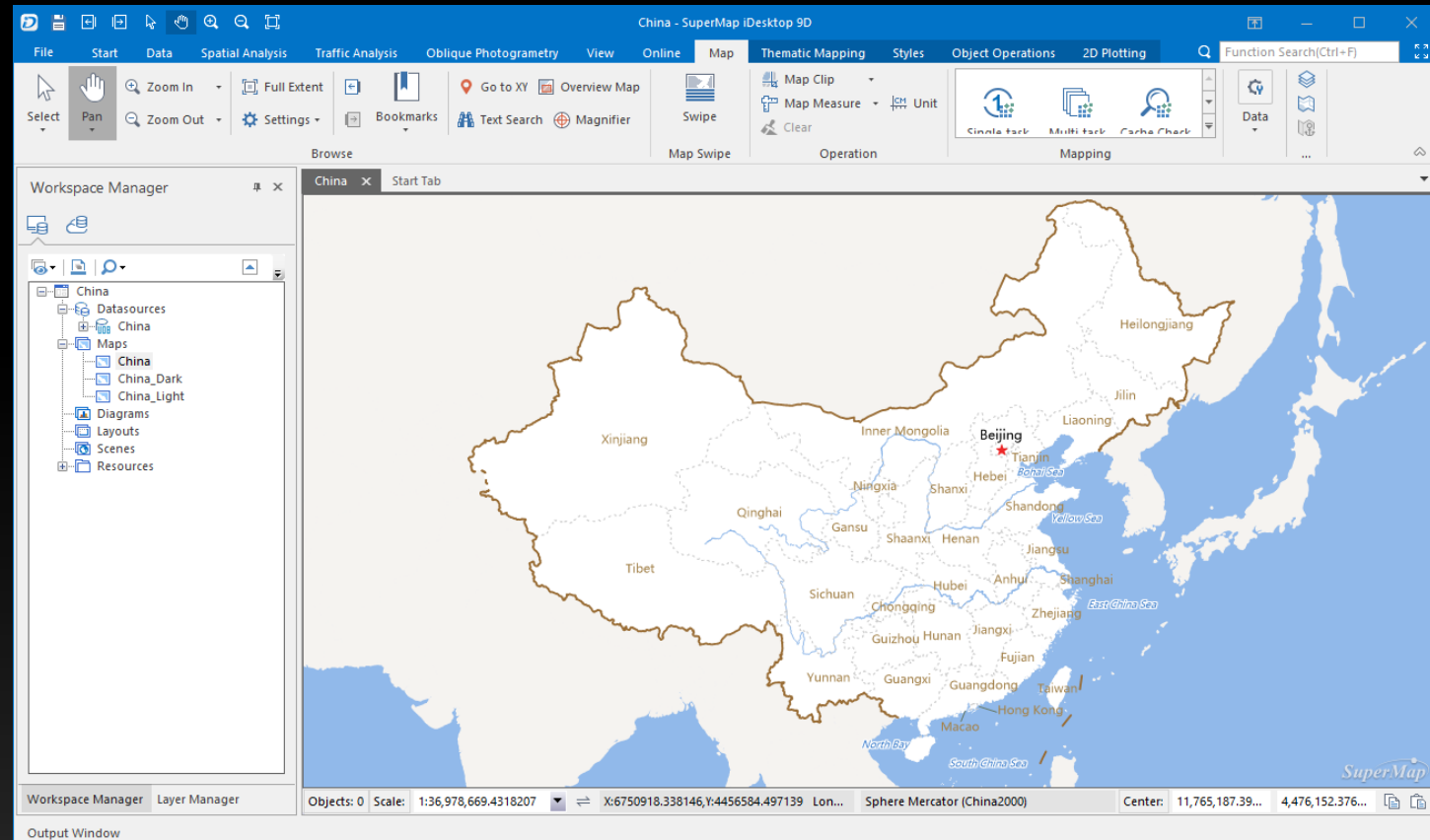


# Steps



# Step 1: Prepare GIS Data

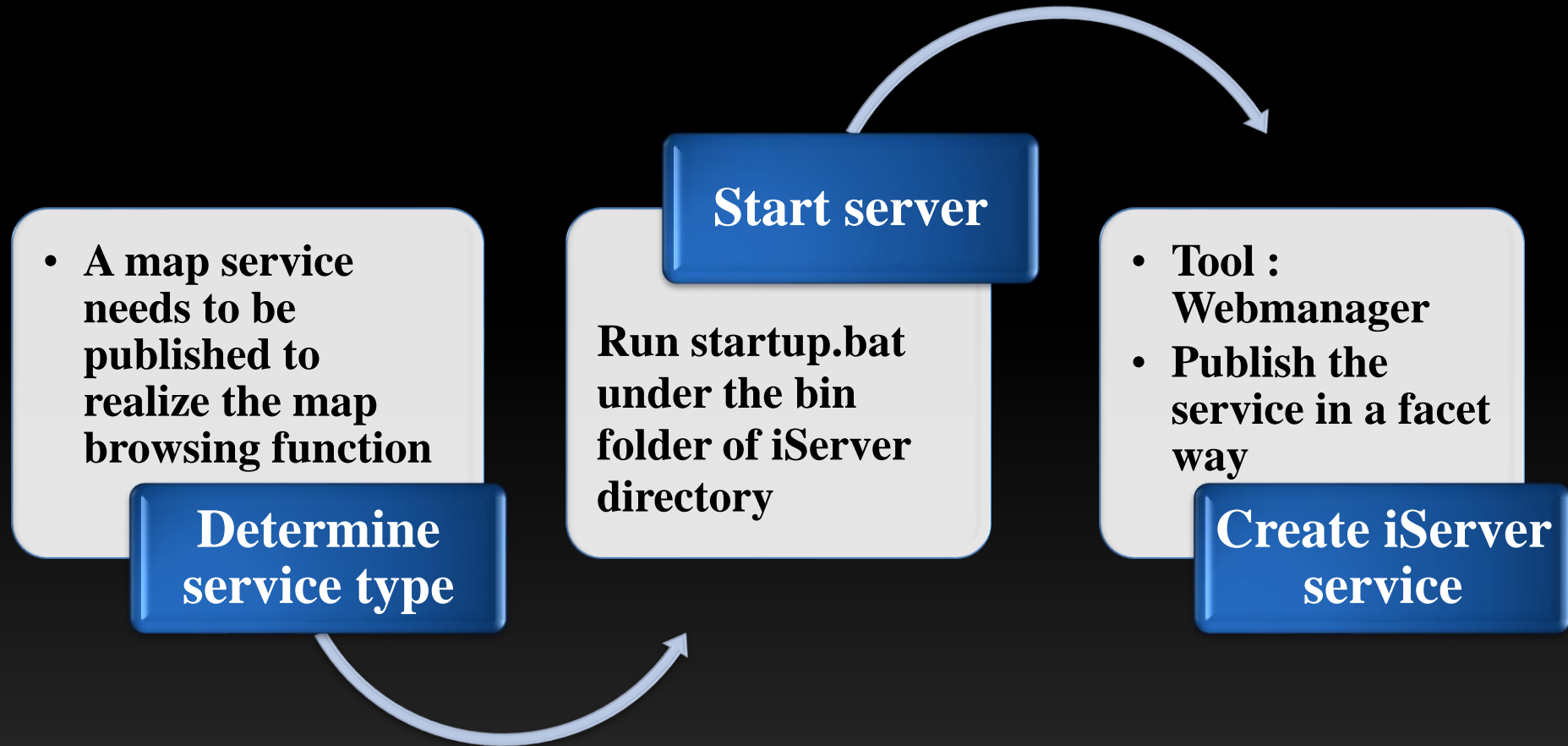
- Prepare GIS data with SuperMap iDesktop
  - Map: World



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

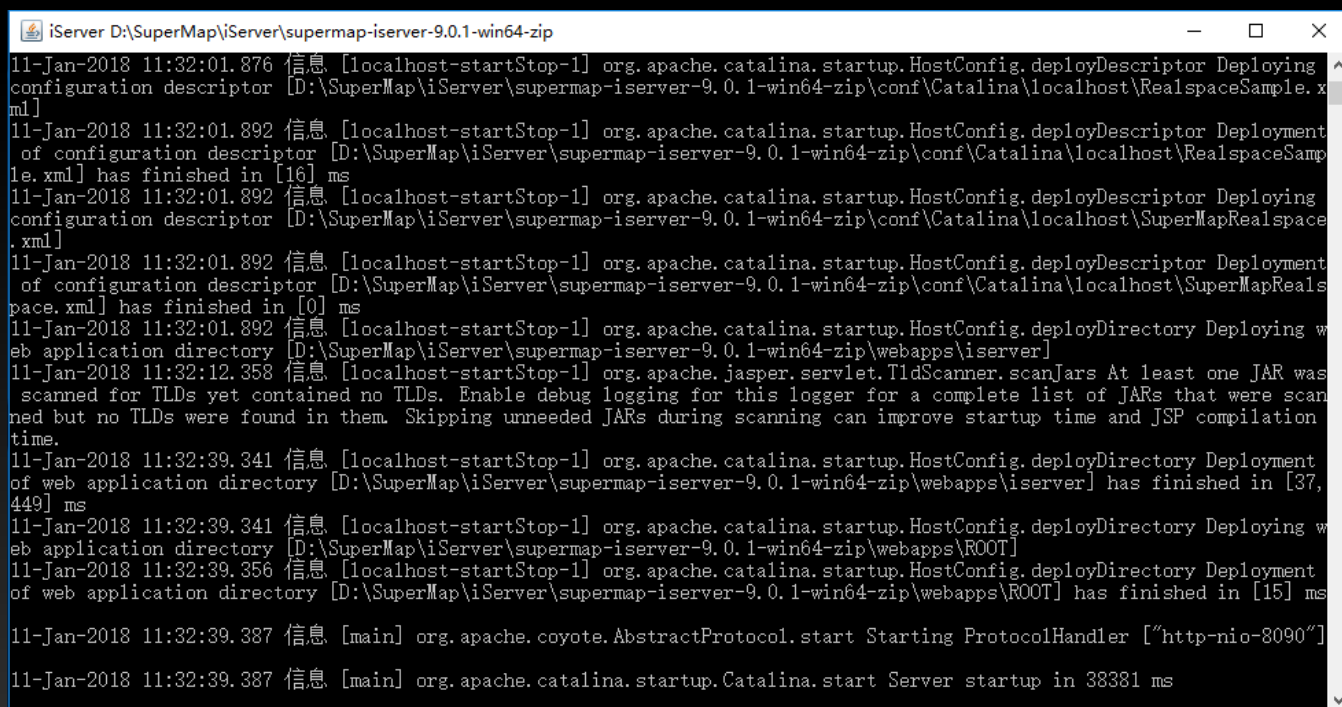
# Step 2: Create iServer Service

- 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.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\RealspaceSample.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\SuperMapRealspace.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 web
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 scanned
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 web
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

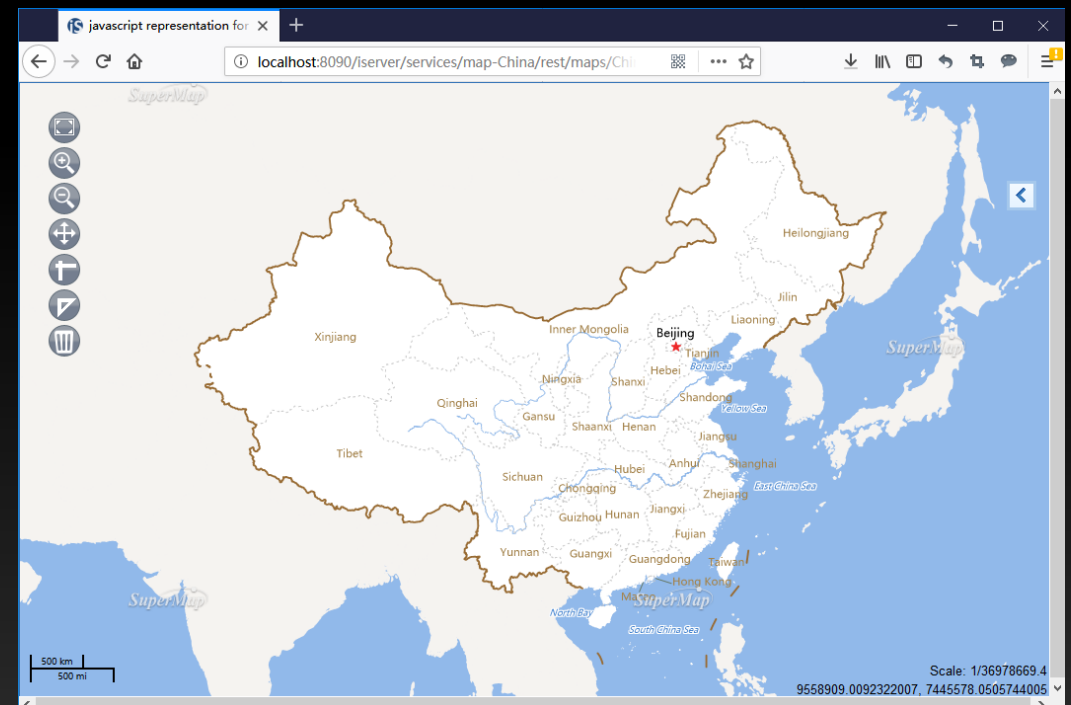
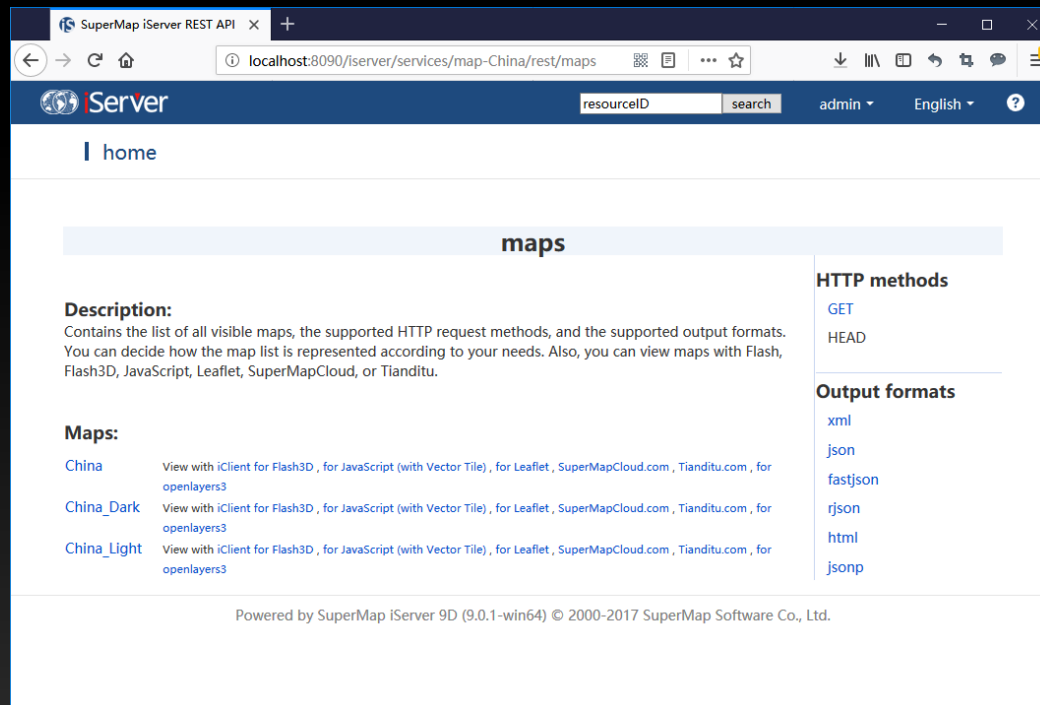
- <http://localhost:8090/iserver/manager/>

The screenshot displays the SuperMap iServer Manager web interface. The main navigation bar includes Home, Services, Clusters, Logs, Security, Monitoring, Backup, Task, License, and Settings. The left sidebar contains shortcuts for 'Quickly publish services', 'Manage service instances', 'Configure clusters', 'Distributed tiles', 'Manage security', and 'Backup and restore'. A red box highlights the 'Quickly publish services' shortcut, with a red arrow pointing to a modal dialog titled 'Quickly publish service- Please select the data source'. This dialog contains the text 'Data source can be workspace or standard remote service.' and a dropdown menu for 'Data source' currently set to 'Workspace', with 'Next' and 'Cancel' buttons. To the right, another modal dialog titled 'Quickly publish service-Please select the service type' is open, listing various service types supported by the current data source, each with a checkbox and a dropdown arrow. The list includes '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', and 'Google REST Map Service'. At the bottom of this dialog are 'Back', 'Next', and 'Cancel' buttons.



# Step 2: Test iServer Service

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

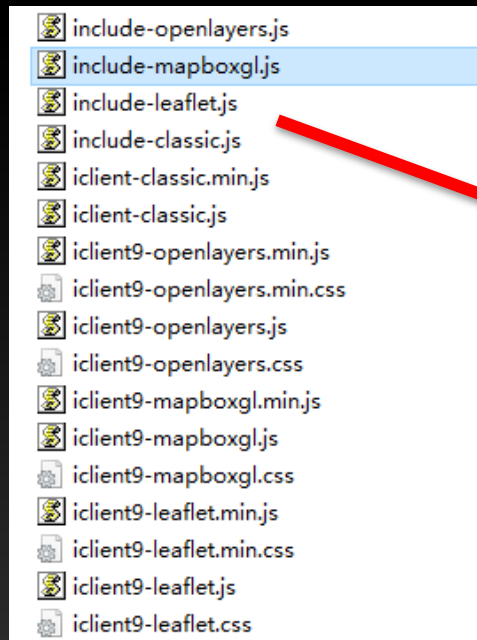


# Step 3: Develop Web System

- 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)



```
31 function load() {
32   var includes=(targetScript.getAttribute('include')||"").split(",");
33   var excludes=(targetScript.getAttribute('exclude')||"").split(",");
34   if(!inArray(excludes,'mapbox-gl')) {
35     inputCSS("../web/libs/mapbox-gl-js/mapbox-gl.css");
36     inputScript("../web/libs/mapbox-gl-js/mapbox-gl.js");
37   }
38   if(inArray(includes,'draw')){
39     inputCSS("../web/libs/mapbox-gl-js/plugins/mapbox-gl-draw/mapbox-gl-draw.css");
40     inputScript("../web/libs/mapbox-gl-js/plugins/mapbox-gl-draw/mapbox-gl-draw.js");
41   }
42   if (inArray(includes, 'compare')) {
43     inputCSS("../web/libs/mapbox-gl-js/plugins/mapbox-gl-compare/mapbox-gl-compare.css");
44     inputScript("../web/libs/mapbox-gl-js/plugins/mapbox-gl-compare/mapbox-gl-compare.js");
45   }
46   if(inArray(includes,'mapv')){
47     inputScript("../web/libs/mapv/mapv.min.js");
48   }
49   if(inArray(includes,'echarts')){
50     inputScript("../web/libs/echarts/echarts.min.js");
51     inputScript("../web/libs/echartsLayer/EchartsLayer.js");
52   }
53   if (!inArray(excludes, 'iclient9-mapboxgl')) {
54     inputScript("../dist/iclient9-mapboxgl.min.js");
55   }
56   if(inArray(includes,'proj4')){
57     inputScript("../web/libs/proj4js/proj4.js");
58   }
}
```

A screenshot of a code editor showing the contents of the file 'include-mapboxgl.js'. The code defines a 'load()' function that dynamically loads various JavaScript and CSS files based on attributes. A red box highlights the 'load()' function, and a red arrow points from the file explorer to this function.

# 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 type="text/javascript" src="dist/include-mapboxgl.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.

```
var map;  
function onPageLoad()  
    map=new mapboxgl.Map({  
        container:"myMap",  
        style:{"version":8,  
            "sources": {"raster-tiles": {"type": "raster",  
                "tiles": ['http://localhost:8090/iserver/services/map-  
                    china400/rest/maps/China/zxyTileImage.png?z={z}&x={x}&y={y}'],  
            "tileSize": 256}},  
            "layers": [{"id": "simple-tiles", "type": "raster", "source": "raster-tiles",  
                "minzoom": 0, "maxzoom":22}], center:[0,0], zoom:3 });  
}
```

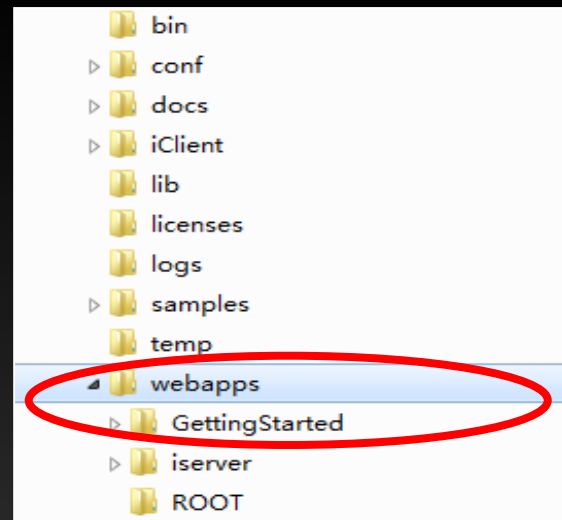
# Step 3: Add Navigation controls

```
<head>
.....
<script type="text/javascript">
  var map;
  function onPageLoad(){
    map=new mapboxgl.Map({
      .....
    });
    map.addControl(new mapboxgl.NavigationControl(),'top-left');
  }
</script>
</head>
```



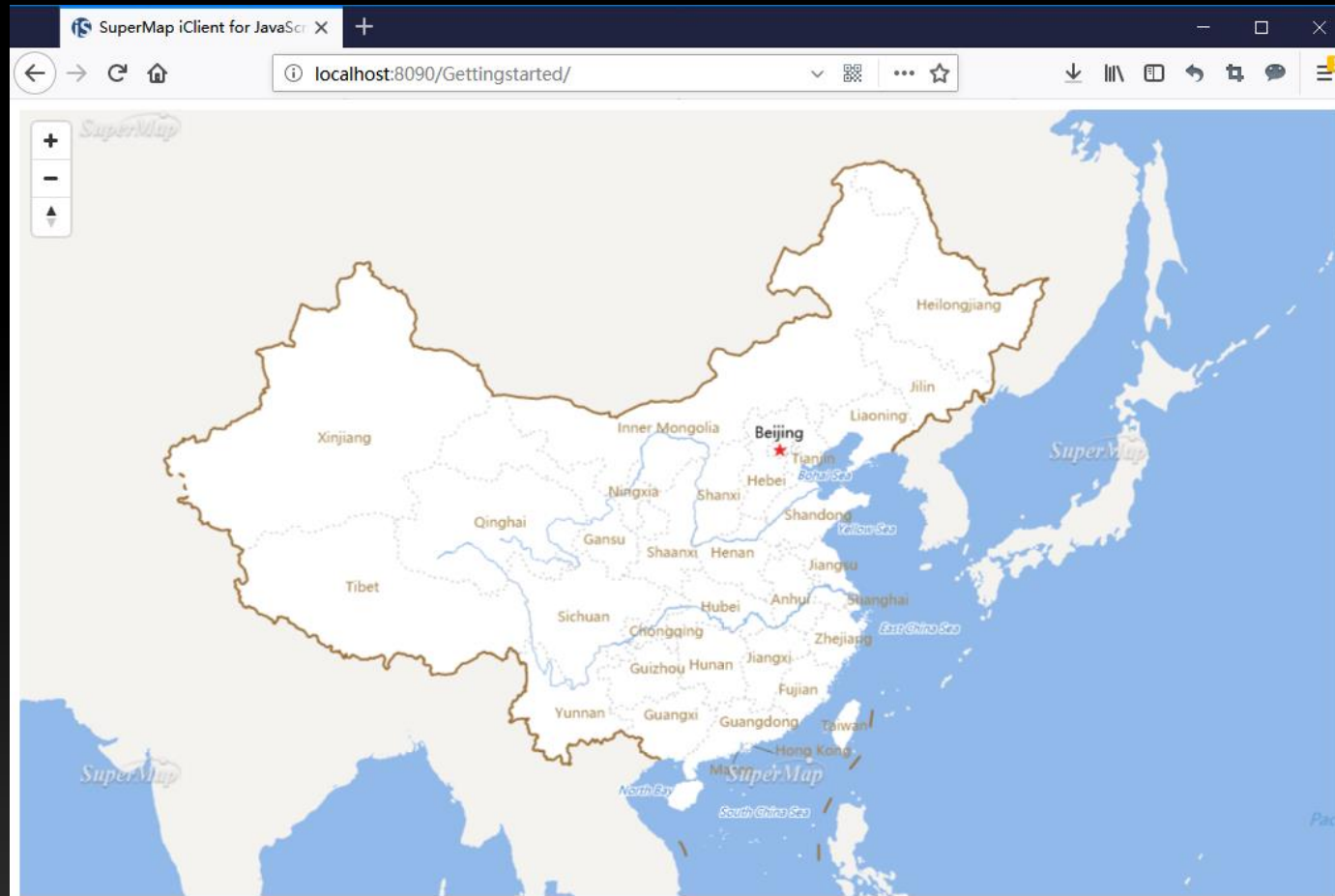
# Step 4: Publish Web System

- 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/>



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# Thank You!

