The instructions of offline, online tile data

1 Making data

This paper mainly introduces the map cache data making, as well as the cache data using by service and video plug-in two ways. The desktop software used to make data is SuperMap iDesktop 8C(2017).

1.1 Making map cache data

First step: Double clicking to open map.

Second step: Clicking on the " map cache " button of "operation" group in " map " tab. Opening "generating map cache" dialog box, setting the related parameters of generating map cache. (The " map cache " button in the version which is lower than 8C(2017), is in "cache" group of "start" tab)

Third step: Setting the scale. The application will default to provide a set of scale, if users don't want to use the default, users can re-input.

Fourth step: Setting basic parameters. Version number is 5.0, subdivision way is local subdivision, setting the cache name and cache path.
Fifth step: Setting scope parameters. The cache scope and index scope use the default scope of the whole map. When generating map cache of latitude and longitude coordinates, the left side of “index range” is set to -180, the up side is set to 90, otherwise it can’t be displayed correctly in the mobile terminal.
Sixth step: Setting image storage parameter. Image type is JPG, discrete data storage type is "primitive", compact data storage type is "compact", it is recommended to use compact data, block size is 512 * 512 pixels.

Seventh step: Clicking on the "generate" button, waiting for generating data. After the end of generating, the input window will have prompt contents.

1.2 Map cache generating results

After generating cache, in the first level folder, including data folder and sci file, as shown in the figure below:

In secondary folder, including the folder named as set scale and an inf file, as shown in the figure below:
2 Using data

2.1 Opening offline tile data

IMobile 8C (2017) SP1 version optimizes the way of using offline tile data, the offline title files can be directly opened through the stored paths of offline tile data files on the mobile device, it no longer needs to configure data in advance.

Loading data

Loading offline tile data files, it only needs to set the stored paths and engine types (Rest) of data on the mobile terminal. The key codes are as follows:

```java
m_workSpace = newWorkspace();
// Associating the map display controls with the workspace
m_mapView = (MapView) findViewById(R.id.Map_view);

m_mapControl = m_mapView.getMapControl();

m_mapControl.getMap().setWorkspace(m_workSpace);
// Storing data paths
String SDCARD = android.os.Environment.getExternalStorageDirectory().getAbsolutePath();
String url = SDCARD + "\changchun/changchun.sci"
DatasourceConnectionInfo info = newDatasourceConnectionInfo();

// Setting alias
info.setAlias(changchun);
// Setting Server
info.setServer(url);

// Setting the engine type connecting to data source REST map service engine types
info.setEngineType(EngineType.Rest);
// Getting data source sets
Datasources datasources = m_workSpace.getDatasources();
// Opening data source
Datasource ds = datasources.open(info);
// Adding to map window
m_mapControl.getMap().getLayers().add(ds.getDatasets().get(0), true);
// Entire view
m_mapControl.getMap().viewEntire();
```
2.1 Opening online tile data

Loading data

Loading online tile data files, it only needs to set the address and engine types (Rest) of the online tile service. The key codes are as follows:

```java
// New workspace
m_workSpace = new Workspace();
// Associate map display controls with workspace
m_mapView = (MapView)findViewById(R.id.Map_view);
// Associate MapView with MapControl
m_mapControl = m_mapView.getMapControl();
// Set workspace
m_mapControl.getMap().setWorkspace(m_workSpace);
// Store data paths
String server = "http://192.168.120.139:8090/iserver/services/map-changchun/rest/maps/changchun";
DatasourceConnectionInfo info = new DatasourceConnectionInfo();
// Set Server
info.setServer(server);
// Set engine type to REST
info.setEngineType(EngineType.Rest);
// Get data sources
Datasources datasources = m_workSpace.getDatasources();
// Open data source
Datasource ds = datasources.open(info);
// Add to map window
m_mapControl.getMap().getLayers().add(ds.getDatasets().get(0), true);
// Entire view
m_mapControl.getMap().viewEntire();
```