

```
1 public class DeviceConnectActivity extends CommonEventBaseFragmentActivity implements
2 ViewPager.OnPageChangeListener
3 {
4     public static boolean gDeviceConnect = false;
5     private DeviceConnectFragment deviceConnectFragment = null;
6     private BluetoothNetworkFragment bluetoothNetworkFragment = null;
7     private CommonFragmentAdapter mFragmentAdapter;
8     @Override
9     protected void onCreate(Bundle savedInstanceState)
10    {
11        super.onCreate(savedInstanceState);
12        setContentView(R.layout.activity_device_connect);
13        gDeviceConnect = true;
14        initialUI();
15        if (!ConfigDeviceManage.GetInstance().getDeviceModelType().isSupportNfc()) {
16            Common BaseActivity. mDeviceNFC.init(this);
17            Common BaseActivity. mDeviceNFC.setNfcCallback(this);
18        }
19    }
20    private void initialUI()
21    {
22        mFragmentAdapter = new CommonFragmentAdapter(getSupportFragmentManager());
23        deviceConnectFragment = new DeviceConnectFragment();
24        mFragmentAdapter.addFragment(deviceConnectFragment);
25        if (AppFinalUtil.getAppID().isMiniApp())
26        {
27            bluetoothNetworkFragment = new BluetoothNetworkFragment();
28            mFragmentAdapter.addFragment(bluetoothNetworkFragment);
29        }
30        ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
31        viewPager.setAdapter(mFragmentAdapter);
32        TabLayout tabLayout = findViewById(R.id.tabLayout_Fragment);
33        tabLayout.setupWithViewPager(viewPager);
34        if (mFragmentAdapter.getCount() <= 1)
35        {
36            tabLayout.setVisibility(View.GONE);
37        }
38        else {
39            if (DeviceManage.GetInstance().getConnectedStatus() ==
40            ConnectListener.CommanderStatus.SUCCESS)
41            {
42                viewPager.setCurrentItem(1);
43            }
44        }
45        CustomWaitingLayout waitingLayout = findViewById(R.id.waittingLayout);
46        waitingLayout.setOnClickListener(new View.OnClickListener() {
47            @Override
48            public void onClick(View v) {
49                DeviceManage.GetInstance().disConnect();
50                showWaitingDialog(false);
```

```
1         }
2     });
3     CustomCommandWaitingLayout           commandWaitingLayout      =
4     findViewById(R. id. commandWaitingLayout) ;
5     commandWaitingLayout. setOnCommandListener(new
6     CustomCommandWaitingLayout. OnCommandListener() {
7         @Override
8         public void onCommandStop() {
9             deviceConnectFragment. onButtonStop();
10        }
11        @Override
12        public void onCommandFinish(boolean finish) {
13            if (finish) {
14                finish();
15            }
16        }
17    });
18 }
19 protected void showWaitingDialog(boolean isShow)
20 {
21     setVisibility(R. id. waitingLayout, isShow ?View. VISIBLE : View. GONE);
22 }
23 @Override
24 public void onActivityResult(int requestCode, int resultCode, Intent data) {
25     super.onActivityResult(requestCode, resultCode, data);
26     ViewPager viewPager = findViewById(R. id. viewPager_Fragment);
27     mFragmentAdapter.getItem(viewPager.getCurrentItem()).onActivityResult((requestCode &
28 0xFFFF), resultCode, data);
29 }
30 @Override
31 public void onDeviceFound(String name, String address) {
32     DeviceModelType type = ConfigDeviceManage. GetInstance(). getDeviceModelType();
33     if (deviceConnectFragment != null && type. isSupportNfc() &&
34 CommandSendManage. getInstance(). size() <= 0)
35     {
36         if (DeviceManage. GetInstance(). isConnected())
37         {
38             if (DeviceManage. GetInstance(). getConnectedStatus() !=
39 ConnectListener. CommanderStatus. FAIL &&
40                 address. equals(ConfigDeviceManage. GetInstance(). getBluetoothAddress()))
41                 return;
42             deviceConnectFragment. onButtonStop();
43         }
44         ConfigDeviceManage. GetInstance(). setBluetoothName(name);
45         ConfigDeviceManage. GetInstance(). setBluetoothAddress(address);
46         deviceConnectFragment. updateDeviceLinker(DeviceLinkerType. BLUETOOTH);
47         deviceConnectFragment. onButtonConnect();
48     }
49 }
50 }
```

```
1  public void onEventMainThread(DeviceUpdateEvent.UpdateNetworkConnectStatus obj)
2  {
3      if (obj == null || bluetoothNetworkFragment == null)
4          return;
5      Toast toast = Toast.makeText(this, obj.getStatus(), Toast.LENGTH_SHORT);
6      toast.setGravity(Gravity.CENTER, 0, 0);
7      toast.show();
8      bluetoothNetworkFragment.updateConnectUI();
9  }
10 public void onEventMainThread(DeviceUpdateEvent.ReceiverNetworkData obj)
11 {
12     if (obj == null || bluetoothNetworkFragment == null)
13         return;
14     bluetoothNetworkFragment.receiverNetworkData(obj.getSize());
15 }
16 public void onEventMainThread(DeviceUpdateEvent.UpdateMountPointSuccessStatus obj) {
17     if (obj == null || bluetoothNetworkFragment == null)
18         return;
19     if (obj.IsGetMountPointSuccess()) {
20         SourceTableManage.getInstance().SaveSourceTable();
21         makeTextString(R.string.string_prompt_get_mount_point_list_succeeded,
22 Gravity.CENTER);
23     } else {
24         makeTextString(R.string.string_prompt_get_mount_point_failed, Gravity.CENTER);
25     }
26     showWaitingDialog(false);
27     bluetoothNetworkFragment.updateMountPointFinish();
28 }
29 public void onEventMainThread(DeviceUpdateEvent.DeviceConnectResultStatus eventStatus) {
30     showWaitingDialog(false);
31     if (eventStatus.getIsConnectSuccess())
32     {
33         DeviceManage.GetInstance().setConnectState(true);
34         if (deviceConnectFragment != null)
35             deviceConnectFragment.updateButtonState();
36         CustomCommandWaittingLayout           commandWaittingLayout
37         findViewById(R.id.commandWaittingLayout);
38         commandWaittingLayout.startSendCommand(bluetoothNetworkFragment == null, true);
39     } else {
40         if (DeviceManage.GetInstance().getCurLinkerType() == DeviceLinkerType.LOCAL) {
41             makeTextString(getString(R.string.toast_internal_gps_not_enabled));
42         } else {
43             makeTextString(getString(R.string.string_prompt_connection_failed));
44         }
45     }
46 }
47 @Override
48 public void finish()
49 {
50     if (deviceConnectFragment != null && deviceConnectFragment.cancelBatchSelectMode())
```

```
1      return;
2      CustomWaittingLayout waittingLayout = findViewById(R. id. waittingLayout);
3      if (waittingLayout.getVisibility() == View. VISIBLE)
4          return;
5      CustomCommandWaittingLayout           commandWaittingLayout
6      findViewById(R. id. commandWaittingLayout);
7      if (commandWaittingLayout.getVisibility() == View. VISIBLE)
8          return;
9      commandWaittingLayout.setOnCommandListener(null);
10     ConfigDeviceManage. GetInstance(). saveConfig();
11     gDeviceConnect = false;
12     super. finish();
13 }
14 @Override
15 public void onPageScrolled(int position, float positionOffset, int positionOffsetPixels) {
16     if (bluetoothNetworkFragment != null) {
17         ViewPager viewPager = findViewById(R. id. viewPager_Fragment);
18         CommonV4Fragment           commonV4Fragment
19         mFragmentAdapter.getItem(viewPager.getCurrentItem());
20         CustomWaittingLayout waittingLayout = findViewById(R. id. waittingLayout);
21         if (commonV4Fragment == deviceConnectFragment)
22             {
23                 waittingLayout.setOnClickListener(new View. OnClickListener() {
24                     @Override
25                     public void onClick(View v) {
26                         DeviceManage. GetInstance(). disConnect();
27                         showWaitingDialog(false);
28                     }
29                 });
30             }
31         else {
32             waittingLayout.setOnClickListener(null);
33         }
34     }
35 }
36 @Override
37 public void onPageSelected(int position) {
38 }
39 @Override
40 public void onPageScrollStateChanged(int state) {
41 }
42 }
43 public class BluetoothSearchActivity extends CommonGrid BaseActivity
44     implements View. OnClickListener {
45     private DeviceModelType deviceModelType = DeviceModelType. TYPE_UNKNOWN;
46     private BroadcastReceiver mBluetoothReceiver = null;
47     private ArrayList<tagDeviceNode> deviceNodeArrayList = new ArrayList<>();
48     @Override
49     protected int getContentView() {
50         return R. layout. activity_bluetooth_search;
```

```
1     }
2     @Override
3     protected void initCustom() {
4         deviceModelType
5         DeviceModelType swigToEnum(Intent intent) {
6             return DeviceModelType.getTypeUnknown();
7         }
8         try {
9             if (mGridItemListAdapter == null) {
10                 mGridItemListAdapter = new CustomGridBluetoothItemAdapter(this, this,
11                     deviceNodeArrayList);
12             }
13         } catch (Exception e) {
14             e.printStackTrace();
15             return;
16         }
17         mGridView.setAdapter(mGridItemListAdapter);
18         if (mBluetoothReceiver == null) {
19             IntentFilter intentFilter = new IntentFilter();
20             intentFilter.addAction(BluetoothDevice.ACTION_FOUND);
21             intentFilter.addAction(BluetoothAdapter.ACTION_DISCOVERY_FINISHED);
22             intentFilter.addAction(BluetoothDevice.ACTION_BOND_STATE_CHANGED);
23             intentFilter.addAction(BluetoothAdapter.ACTION_SCAN_MODE_CHANGED);
24             intentFilter.addAction(BluetoothAdapter.ACTION_STATE_CHANGED);
25             mBluetoothReceiver = new BluetoothStateReceiver();
26             registerReceiver(mBluetoothReceiver, intentFilter);
27         }
28         updatePairedDeviceList();
29         onButtonSearchBluetooth();
30     }
31     @Override
32     public void onClickItem(int position) {
33         if (mGridItemListAdapter.isBatchSelectMode()) {
34             mGridItemListAdapter.onButtonCheckItem(position);
35         } else {
36             int selectPosition = position;
37             if (mGridItemListAdapter.getSelectedPosition() >= 0/* == position*/) {
38                 selectPosition = -1;
39             }
40             onClickApply(selectPosition);
41         }
42     }
43     private void updatePairedDeviceList() {
44         deviceNodeArrayList.clear();
45         for (int i = 0; deviceNodeArrayList.size() < 5 && i <
46             ConfigDeviceManage.GetInstance().getBluetoothDeviceCount(); i++) {
47             TagDeviceNode deviceNode = ConfigDeviceManage.GetInstance().getBluetoothDevice(i);
48             deviceNodeArrayList.add(deviceNode);
49         }
50         mGridItemListAdapter.setSelectedPosition(-1);
51         if (AppFinalUtil.getAppID().isXSurvey()) {
```

```
1         setVisibility(R. id. LinearLayout_BluetoothList, deviceNodeArrayList. size() > 0 ?  
2             View. VISIBLE : View. GONE);  
3         } else {  
4             setVisibility(R. id. LinearLayout_BluetoothList, View. GONE);  
5         }  
6     }  
7     @Override  
8     public void finish() {  
9         if (mBluetoothReceiver != null) {  
10             unregisterReceiver(mBluetoothReceiver);  
11             mBluetoothReceiver = null;  
12         }  
13         BluetoothAdapter adapter = BluetoothAdapter. getDefaultAdapter();  
14         if (adapter != null && adapter. isDiscovering()) {  
15             adapter. cancelDiscovery();  
16         }  
17         super. finish();  
18     }  
19     @Override  
20     protected void onClickApply(int selectedIndex) {  
21         if (selectedIndex < 0)  
22             return;  
23         tagDeviceNode deviceNode = (tagDeviceNode)mGridItemListAdapter. getItem(selectedIndex);  
24         finish(deviceNode. strName, deviceNode. strAddress);  
25     }  
26     @Override  
27     protected void onButtonSelect() {  
28     }  
29     @Override  
30     protected void onButtonAdd() {  
31     }  
32     @Override  
33     protected void onButtonDelete(int index) {  
34     }  
35     @Override  
36     protected void onButtonDelete(ArrayList<Integer> indexs) {  
37         if (indexs. size() >= 5)  
38         {  
39             ConfigDeviceManage. GetInstance(). removeAll();  
40         }  
41         else {  
42             for (int i = indexs. size() - 1; i >= 0; i--) {  
43                 tagDeviceNode          deviceNode          =          (tagDeviceNode)  
44             mGridItemListAdapter. getItem(indexs. get(i));  
45             ConfigDeviceManage. GetInstance(). removeBluetoothDevice(deviceNode. strAddress);  
46             }  
47         }  
48         updatePairedDeviceList();  
49     }  
50     @Override
```

```
1  protected void onButtonShare() {
2  }
3  private static void unpairDevice(BluetoothDevice device) {
4      try {
5          Method createBondMethod = device.getClass().getMethod("cancelBondProcess");
6          createBondMethod.invoke(device);
7      } catch (Exception e) {
8      }
9  }
10 @Override
11 protected void onButtonImport() {
12 }
13 @Override
14 protected void onButtonExport() {
15 }
16 @Override
17 protected void onButtonOK() {
18     onButtonSearchBluetooth();
19 }
20 private void onButtonSearchBluetooth() {
21     BluetoothAdapter adapter = BluetoothAdapter.getDefaultAdapter();
22     if (adapter == null) {
23         return;
24     }
25     if (adapter.isDiscovering()) {
26         adapter.cancelDiscovery();
27         setTextViewText(R.id.button_OK, getString(R.string.button_refresh));
28         return;
29     }
30     if (!checkGpsPermission()) {
31         makeTextString(R.string.toast_gps_permission_check);
32         return;
33     }
34     if (!checkOpen()) {
35         makeTextString(R.string.toast_turning_on_bluetooth);
36         return;
37     }
38     adapter.startDiscovery();
39     setTextViewText(R.id.button_OK, getString(R.string.string_prompt_searching));
40     CustomTextViewListAdapter viewListLayoutAvailable
41     findViewById(R.id.viewListLayoutAvailable);
42     viewListLayoutAvailable.clear();
43 }
44 private boolean checkGpsPermission() {
45     if(android.os.Build.VERSION.SDK_INT >= 23) {
46         if(ContextCompat.checkSelfPermission(this,
47             Manifest.permission.ACCESS_FINE_LOCATION)!= PackageManager.PERMISSION_GRANTED) {
48             ActivityCompat.requestPermissions(this, new
49             String[]{Manifest.permission.ACCESS_FINE_LOCATION}, 101);
50             return false;
51     }
52 }
```

```
1         }
2             return true;
3         }
4     return true;
5 }
6 private boolean mBeWaitingWifiOpen = false;
7 private boolean checkOpen() {
8     if (mBeWaitingWifiOpen)
9         return false;
10    BluetoothAdapter mBluetoothAdapter = BluetoothAdapter.getDefaultAdapter();
11    if (mBluetoothAdapter == null) {
12        return false;
13    }
14    if (!mBluetoothAdapter.isEnabled()) {
15        mBluetoothAdapter.enable();
16        mBeWaitingWifiOpen = true;
17        return false;
18    }
19    return true;
20 }
21 private void finish(String strName, String strAddress)
22 {
23     Intent intent = new Intent();
24     intent.putExtra("BluetoothName", strName);
25     intent.putExtra("BluetoothAddress", strAddress);
26     setResult(AppFinalUtil.RETURN_CODE_VALUE_BACK, intent);
27     finish();
28 }
29 @Override
30 public void onClickEdit() {
31 }
32 @Override
33 public void onClickShare() {
34 }
35 public class BluetoothStateReceiver extends BroadcastReceiver {
36     ArrayList<String> bluetoothDeviceList = new ArrayList<>();
37     @Override
38     public void onReceive(Context context, Intent intent) {
39         switch (intent.getAction()) {
40             case BluetoothDevice.ACTION_FOUND:
41                 BluetoothDevice device
42                 intent.getParcelableExtra(BluetoothDevice.EXTRA_DEVICE);
43                 tagDeviceNode deviceNode = new tagDeviceNode();
44                 deviceNode.strName = device.getName();
45                 if (deviceNode.strName == null || deviceNode.strName.equals(""))
46                     deviceNode.strName = "Unknow Device";
47                 return;
48             }
49             if (deviceModelType == DeviceModelType.TYPE_MODEL_ZX_RTK)
50             {
```

```
1         if (deviceNode.strName.indexOf("Z") != 0)
2             return;
3     }
4     deviceNode.strAddress = device.getAddress();
5     LayoutInflater inflater = LayoutInflater.from(context);
6     View convertView = convertView;
7     inflater.inflate(R.layout.layout_gridview_bluetooth_item, null);
8     TextView textView = convertView.findViewById(R.id.textView_Name);
9     textView.setText(deviceNode.strName);
10    textView = convertView.findViewById(R.id.textView_Address);
11    textView.setText(deviceNode.strAddress);
12    convertView.setOnClickListener(new View.OnClickListener() {
13        @Override
14        public void onClick(View v) {
15            TextView textView = v.findViewById(R.id.textView_Name);
16            String strName = textView.getText().toString();
17            textView = v.findViewById(R.id.textView_Address);
18            String strAddress = textView.getText().toString();
19            finish(strName, strAddress);
20        }
21    });
22    CustomTextViewListLayout viewListLayoutAvailable =
23    findViewById(R.id.viewListLayoutAvailable);
24    View viewLine = convertView.findViewById(R.id.viewLine);
25    if (viewListLayoutAvailable.getCount() <= 0)
26    {
27        viewLine.setVisibility(View.GONE);
28        bluetoothDeviceList.clear();
29    } else {
30        viewLine.setVisibility(View.VISIBLE);
31    }
32    for (int i=0; i<bluetoothDeviceList.size(); i++)
33    {
34        if
35        (deviceNode.strAddress.equalsIgnoreCase(bluetoothDeviceList.get(i)))
36        {
37            return;
38        }
39    }
40    bluetoothDeviceList.add(deviceNode.strAddress);
41    viewListLayoutAvailable.add(convertView);
42    break;
43 case BluetoothAdapter.ACTION_DISCOVERY_FINISHED:
44     setTextViewText(R.id.button_OK, getString(R.string.button_refresh));
45     break;
46 case BluetoothAdapter.ACTION_STATE_CHANGED:
47     int blueState = intent.getIntExtra(BluetoothAdapter.EXTRA_STATE, 0);
48     switch(blueState){
49         case BluetoothAdapter.STATE_TURNING_ON:
50             break;
```

```
1         case BluetoothAdapter.STATE_ON:
2             if (mBeWaitingWifiOpen) {
3                 mBeWaitingWifiOpen = false;
4                 onButtonSearchBluetooth();
5             }
6             break;
7         case BluetoothAdapter.STATE_TURNING_OFF:
8             break;
9         case BluetoothAdapter.STATE_OFF:
10            break;
11        }
12        break;
13    }
14}
15}
16}
17public class BluetoothNetworkFragment extends CommonV4Fragment implements OnClickListener
18{
19    public tagDataLinkParameter dataLinkParameter = new tagDataLinkParameter();
20    @Nullable
21    @Override
22    public View onCreateView(LayoutInflater inflater, @Nullable ViewGroup container, Bundle
23 savedInstanceState) {
24        if (mInfoView != null)
25            return mInfoView;
26        mInfoView = inflater.inflate(R.layout.layout_bluetooth_network, container, false);
27        dataLinkParameter.set(DeviceCommandParse.getInstance().mConfigWorkMode.dataLinkParameter());
28        DeviceManage.GetInstance().setPageInBlueToothSetting(true);
29        dataLinkParameter.bluetoothParam.set(ConfigNtripParameter.getInstance());
30        initializeUI();
31        updateValueToUI();
32        return mInfoView;
33    }
34    @Override
35    public String getTitle() {
36        return AppFinalUtil.getString(R.string.string_differential_data);
37    }
38    @Override
39    public void updateValueToUI()
40    {
41        if (mInfoView == null)
42            return;
43        CustomTextviewLayoutSelect layoutSelectDataLink
44        mInfoView.findViewById(R.id.layoutSelect_DataLink);
45        layoutSelectDataLink.setSelectedId(dataLinkParameter.Type.swigValue());
46        updateConnectUI();
47    }
48    public void updateValueFromUI()
49    {
50        if (dataLinkParameter.Type == EDataLinkType.ExtendSource)
```

```
1     {
2         ConfigNtripParameter.getInstance().setAutoConnect(getCheckButtonChecked(R.id.checkButton_Auto));
3         dataLinkParameter.bluetoothParam.strMountPoint = getTextViewString(R.id.layoutSelectEdit_MountPoint);
4         ConfigNtripParameter.getInstance().set(dataLinkParameter.bluetoothParam);
5         ConfigNtripParameter.getInstance().saveConfig();
6     }
7 }
8
9 }
10 private void initializeUI()
11 {
12     initClickListener(R.id.button_MountPoint, this);
13     initClickListener(R.id.button_Start, this);
14     initClickListener(R.id.button_Stop, this);
15     setCheckButtonChecked(R.id.checkButton_Auto,
16     ConfigNtripParameter.getInstance().isAutoConnect());
17     CustomTimerView timerView_Rev = mInfoView.findViewById(R.id.timerView_Rev);
18     timerView_Rev.setMode(99);
19     timerView_Rev.setMaxValue(8000);
20     initializeMountPointList();
21     CustomTextViewLayoutSelect layoutSelectDataLink = mInfoView.findViewById(R.id.layoutSelect_DataLink);
22     layoutSelectDataLink.registerItemSelectedInterface(new
23     CustomTextViewLayoutSelect.OnItemSelectedListener() {
24         @Override
25         public void onItemSelected(View view, String label, int id) {
26             dataLinkParameter.Type = EDataLinkType.swigToEnum(id);
27             CustomTextviewListLayout linearLayoutDataLink = mInfoView.findViewById(R.id.LinearLayout_DataLink);
28             linearLayoutDataLink.clear();
29             boolean bDisplay = false;
30             boolean bNtripMountPoint = false;
31             switch (dataLinkParameter.Type) {
32                 case ExtendSource: {
33                     bDisplay = true;
34                     linearLayoutDataLink.add(1, StringFunction.format("%s:%s",
35                     getString(R.string.string_connect_mode),
36                     dataLinkParameter.bluetoothParam.connectMode.getTitle()), "", "", "");
37                     switch (dataLinkParameter.bluetoothParam.connectMode) {
38                         case CORS_CONNECT_MODE_NTRIP: {
39                             bNtripMountPoint = true;
40                             setTextViewText(R.id.layoutSelectEdit_MountPoint,
41                             dataLinkParameter.bluetoothParam.strMountPoint);
42                             linearLayoutDataLink.add(2, StringFunction.format("%s:%s",
43                             getString(R.string.string_server_ip), dataLinkParameter.bluetoothParam.strIP),
44                             StringFunction.format("%s:%d", getString(R.string.string_remote_port),
45                             dataLinkParameter.bluetoothParam.nPort), "", ""));
46                             linearLayoutDataLink.add(2, StringFunction.format("%s:%s",
47                             getString(R.string.string_user), dataLinkParameter.bluetoothParam.strUser),
48                             StringFunction.format("%s:%s", getString(R.string.string_password), "*****"), "", ""));
49                         }
50                     }
51                 }
52             }
53         }
54     });
55 }
```

```
1 }  
2 break;  
3 case CORS_CONNECT_MODE_TCP: {  
4     linearLayoutDataLink.add(2, StringFunction.format("%s:%s",  
5 getString(R.string.string_server_ip), dataLinkParameter.bluetoothParam.strIP),  
6 StringFunction.format("%s:%d", getString(R.string.string_remote_port),  
7 dataLinkParameter.bluetoothParam.nPort), "", ""));  
8 }  
9 break;  
10 case CORS_CONNECT_MODE_ZHD://中海达  
11 {  
12     linearLayoutDataLink.add(2, StringFunction.format("%s:%s",  
13 getString(R.string.string_server_ip), dataLinkParameter.bluetoothParam.strIP),  
14 StringFunction.format("%s:%d", getString(R.string.string_remote_port),  
15 dataLinkParameter.bluetoothParam.nPort), "", ""));  
16     linearLayoutDataLink.add(2, StringFunction.format("%s:%s",  
17 getString(R.string.string_group_number), dataLinkParameter.bluetoothParam.strUser),  
18 StringFunction.format("%s:%s", getString(R.string.string_sub_group_number),  
19 dataLinkParameter.bluetoothParam.strPassword), "", ""));  
20 }  
21 break;  
22 case CORS_CONNECT_MODE_HUACE: {  
23     linearLayoutDataLink.add(2, StringFunction.format("%s:%s",  
24 getString(R.string.string_server_ip), dataLinkParameter.bluetoothParam.strIP),  
25 StringFunction.format("%s:%d", getString(R.string.string_remote_port),  
26 dataLinkParameter.bluetoothParam.nPort), "", ""));  
27     linearLayoutDataLink.add(1, StringFunction.format("%s:%s",  
28 getString(R.string.string_huace_base_id), dataLinkParameter.bluetoothParam.strMountPoint),  
29 "", "", ""));  
30 }  
31 break;  
32 }  
33 }  
34 break;  
35 default:  
36     break;  
37 }  
38     linearLayoutDataLink.setVisibility(bDisplay?View.VISIBLE: View.GONE);  
39     setVisibility(R.id.linearLayout_MountPoint,  
40 bNtripMountPoint?View.VISIBLE:View.GONE);  
41     setVisibility(R.id.linearLayout_Cors, dataLinkParameter.Type ==  
42 EDataLinkType.ExtendSource?View.VISIBLE:View.GONE);  
43 }  
44 );  
45 layoutSelectDataLink.addItem(getString(R.string.title_bluetooth_datalink), EDataLinkType.Ext  
46 endSource.swigValue());  
47     CustomTextViewListLayout linearLayoutDataLink =  
48 mInfoView.findViewById(R.id.linearLayout_DataLink);  
49     linearLayoutDataLink.setOnClickListener(new OnClickListener() {  
50         @Override
```

```
1  public void onClick(View v) {
2      Intent intent = new Intent(getContext(), EditRoverDataLinkParamActivity.class);
3      intent.putExtra("DataLinkType", dataLinkParameter.Type.swigValue());
4      switch (dataLinkParameter.Type)
5      {
6          case ExtendSource:
7          {
8              intent.putExtra("BluetoothParam",
9              dataLinkParameter.bluetoothParam.toString());
10         }
11         break;
12     }
13     startActivityForResult(intent, R.id.linearLayout_DataLink&0xFFFF);
14 }
15 );
16 }
17 private void initializeMountPointList()
18 {
19     final CustomTextViewLayoutSelectEdit MountPoint =
20     mInfoView.findViewById(R.id.layoutSelectEdit_MountPoint);
21     MountPoint.setOnClickListener(new OnClickListener() {
22         @Override
23         public void onClick(View v) {
24             CustomInputActivity.InputListener inputListener =
25             CustomInputActivity.InputListener() {
26                 @Override
27                 public void onSelect(String label, int index) {
28                     if (label.indexOf('(') > 0&&
29                         label.indexOf(')') > 0) {
30                         label = label.substring(0, label.indexOf('('));
31                     }
32                     MountPoint.setText(label);
33                 }
34             };
35             CustomInputActivity.SortChangeListener sortChangeListener =
36             CustomInputActivity.SortChangeListener() {
37                 @Override
38                 public void onSortTypeChange(int index) {
39                     SourecTableManage.getInstance().setSortType(index);
40                 }
41                 @Override
42                 public ArrayList<String> getValueList() {
43                     return SourecTableManage.getInstance().getMountPointList();
44                 }
45                 @Override
46                 public String getValue(String inputOld) {
47                     return inputOld;
48                 }
49                 @Override
50                 public ArrayList<String> getSortTypeList() {
```

```
1         ArrayList<String> listSort = new ArrayList<>();
2         listSort.add(getString(R.string.label_sort_name_default));
3         listSort.add(getString(R.string.label_sort_name_pos));
4         listSort.add(getString(R.string.label_sort_name_neg));
5         if (SourecTableManage.getInstance().isSurportSortByDist()) {
6             listSort.add(getString(R.string.label_sort_dist_pos));
7         }
8         return listSort;
9     }
10    @Override
11    public int getSortIndex() {
12        return SourecTableManage.getInstance().getSortType();
13    }
14    };
15    new CustomInputActivity.Builder(getContext())
16        .setMode(CustomInputActivity.MODE_EDIT_SELECT)
17        .setList(SourecTableManage.getInstance().getMountPointList())
18        .setValue(MountPoint.getText())
19        .setTitle(getString(R.string.string_ntrip_mount_point))
20        .setListener(inputListener)
21        .setSortChangeListener(sortChangeListener)
22        .start();
23    }
24);
25}
26@Override
27public void onClick(View v)
28{
29    switch(v.getId())
30{
31        case R.id.button_MountPoint:
32        {
33            onButtonGetMountPoint();
34        }
35        break;
36        case R.id.button_Start:
37        {
38            onButtonStart();
39        }
40        break;
41        case R.id.button_Stop:
42        {
43            onButtonStop();
44        }
45        break;
46    }
47}
48@Override
49public void onActivityResult(int requestCode, int resultCode, Intent data)
50{
```

```
1     super.onActivityResult(requestCode, resultCode, data);
2     if(resultCode == AppFinalUtil.RETURN_CODE_VALUE_BACK)
3     {
4         if (requestCode == (R.id.LinearLayout_DataLink&0xFFFF) && data != null)
5         {
6             switch (dataLinkParameter.Type) {
7                 case ExtendSource:
8                     dataLinkParameter.bluetoothParam.parseValue(data.getStringExtra("BluetoothParam"));
9                     dataLinkParameter.bluetoothParam.strMountPoint
10                = getTextViewString(R.id.layoutSelectEdit_MountPoint);
11                break;
12            }
13            updateValueToUI();
14        }
15    }
16 }
17 private void onButtonGetMountPoint() {
18     if (mInfoView == null)
19         return;
20     mnTimeCount = 0;
21     mHandler.postDelayed(mRunnable, 1000);
22     tagConnectionParameter connectionParameter = new tagConnectionParameter();
23     connectionParameter.set(dataLinkParameter.bluetoothParam);
24     CorsClientManage.GetInstance().setNetworkParameter(connectionParameter.connectMode,
25     connectionParameter.strIP, connectionParameter.nPort, connectionParameter.strUser,
26     connectionParameter.strPassword);
27     CorsClientManage.GetInstance().onUpdateMountPoint();
28     CustomWaittingLayout waitingLayout
29     = AppFinalUtil.activityCurrent.findViewById(R.id.waittingLayout);
30     if (waitingLayout != null) {
31         waitingLayout.setLabel(getString(R.string.command_function_set_start_get_mount_point));
32         waitingLayout.setVisibility(View.VISIBLE);
33     }
34 }
35 public void onButtonStart() {
36     ConfigNtripParameter.getInstance().setAutoConnect(true);
37     if(ConnectListener.CommanderStatus.SUCCESS
38     = DeviceManage.GetInstance().getConnectedStatus())
39     {
40         Toast toast
41         = Toast.makeText(getApplicationContext(),
42         R.string.string_prompt_communication_not_connected, Toast.LENGTH_SHORT);
43         toast.setGravity(Gravity.CENTER, 0, 0);
44         toast.show();
45         return;
46     }
47     if (CorsClientManage.GetInstance().isConnectCors())
48     {
49         return;
50     }
51     dataLinkParameter.bluetoothParam.strMountPoint
52     =
```

```
1  getTextViewById(R. id. layoutSelectEdit_MountPoint);
2      ConfigNtripParameter. getInstance(). set(dataLinkParameter.bluetoothParam);
3      ConfigNtripParameter. getInstance(). saveConfig();
4  CorsClientManage. GetInstance(). setNetworkParameter(dataLinkParameter.bluetoothParam. getMode
5  (eDeviceWorkingMode. Rover),
6          dataLinkParameter.bluetoothParam.strIP, dataLinkParameter.bluetoothParam.nPort,
7          dataLinkParameter.bluetoothParam.strUser,
8  dataLinkParameter.bluetoothParam.strPassword,
9          dataLinkParameter.bluetoothParam.strMountPoint);
10     CorsClientManage. GetInstance(). startConnectCors();
11     updateConnectUI();
12 }
13 public void onButtonStop()
14 {
15     ConfigNtripParameter. getInstance(). setAutoConnect(false);
16     if (!CorsClientManage. GetInstance(). isConnectCors())
17     {
18         return;
19     }
20     CorsClientManage. GetInstance(). stopConnectCors();
21     updateConnectUI();
22 }
23 public void updateConnectUI()
24 {
25     if (mInfoView == null)
26         return;
27     View viewCors = mInfoView.findViewById(R. id. linearLayout_Cors);
28     boolean bConnect = CorsClientManage. GetInstance(). isConnectCors();
29     if (viewCors.getVisibility() != View. VISIBLE)
30     {
31         bConnect = false;
32     }
33     setVisibility(R. id. button_Start, bConnect?View. GONE:View. VISIBLE);
34     setVisibility(R. id. button_Stop, bConnect?View. VISIBLE:View. GONE);
35     setEnabled(R. id. button_MountPoint, !bConnect);
36     setEnabled(R. id. layoutSelectEdit_MountPoint, !bConnect);
37     setEnabled(R. id. layoutSelect_DataLink, false/*!bConnect*/);
38     setEnabled(R. id. linearLayout_DataLink, !bConnect);
39 }
40 int mnCountReceiver = 0;
41 int nLength = 0;
42 long currentTime = 0;
43 public void receiverNetworkData(int length)
44 {
45     if (currentTime/1000 == System. currentTimeMillis()/1000)
46     {
47         nLength += length;
48     }
49     else {
50         currentTime = System. currentTimeMillis();
```

```
1      nLength = length;
2  }
3  Message message = new Message();
4  Bundle bundle = new Bundle();
5  bundle.putInt("length", nLength);
6  message.what = 0;
7  message.setData(bundle);
8  mHandler.sendMessage(message);
9 }
10 public void updateMountPointFinish()
11 {
12     mnTimeCount = 61;
13 }
14 private Handler mHandler = new Handler()
15 {
16     public void handleMessage(Message msg)
17     {
18         switch (msg.what)
19         {
20             case 0: {
21                 View viewCors = mInfoView.findViewById(R.id.linearLayout_Cors);
22                 if (viewCors.getVisibility() != View.VISIBLE)
23                     return;
24                 int length = msg.getData().getInt("length");
25                 CustomTimerView timerView_Rev = mInfoView.findViewById(R.id.timerView_Rev);
26                 mnCountReceiver += length;
27                 mnCountReceiver = (mnCountReceiver%8000);
28                 timerView_Rev.setPosValue(mnCountReceiver);
29                 timerView_Rev.setPromptTextString(String.format("%dB", length));
30             }
31             break;
32         }
33     }
34 };
35 int mnTimeCount = 0;
36 Runnable mRunnable = new Runnable()
37 {
38     @Override
39     public void run()
40     {
41         mnTimeCount++;
42         if (mnTimeCount == 60) {
43             DeviceUpdateUINotify.eventUpdateMountPointSuccess(false);
44         }
45         if (mnTimeCount < 60) {
46             mHandler.postDelayed(this, 1000);
47         }
48     }
49 };
50 @Override
```

```
1  public void onDestroy() {
2      DeviceManage.GetInstance(). setPageInBlueToothSetting(false);
3      mHandler.removeCallbacks(mRunnable);
4      super.onDestroy();
5  }
6 }
7 public class ProjectCreateActivity extends CommonEventBaseFragmentActivity
8     implements OnClickListener, ViewPager.OnPageChangeListener
9 {
10    private ProjectBasicInfoFragment basicInfoFragment = null;
11    private ProjectCoordinateSystemFragment coordinateSystemFragment = null;
12    private CommonFragmentAdapter mFragmentAdapter;
13    @Override
14    protected void onCreate(Bundle savedInstanceState)
15    {
16        super.onCreate(savedInstanceState);
17        setContentView(R.layout.activity_project_create);
18        initialUI();
19    }
20    private void initialUI()
21    {
22        initClickListener(R.id.button_OK, this);
23        initClickListener(R.id.button_Pre, this);
24        initClickListener(R.id.button_Next, this);
25        initClickListener(R.id.button_Cancel, this);
26        mFragmentAdapter = new CommonFragmentAdapter(getSupportFragmentManager());
27        basicInfoFragment = new ProjectBasicInfoFragment();
28        coordinateSystemFragment = new ProjectCoordinateSystemFragment();
29        mFragmentAdapter.addFragment(basicInfoFragment);
30        mFragmentAdapter.addFragment(coordinateSystemFragment);
31        ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
32        viewPager.setAdapter(mFragmentAdapter);
33        viewPager.addOnPageChangeListener(this);
34        TabLayout tabLayout = findViewById(R.id.tabLayout_Fragment);
35        tabLayout.setupWithViewPager(viewPager);
36    }
37    @Override
38    public void onPageScrolled(int i, float v, int i1) {
39        setVisibility(R.id.button_Cancel, i==0?View.VISIBLE:View.GONE);
40        setVisibility(R.id.button_Next, i==0?View.VISIBLE:View.GONE);
41        setVisibility(R.id.button_Pre, i==1?View.VISIBLE:View.GONE);
42        setVisibility(R.id.button_OK, i==1?View.VISIBLE:View.GONE);
43        if (basicInfoFragment == null || coordinateSystemFragment == null)
44            return;
45        if (i==1)
46        {
47            if (basicInfoFragment.isUseLastCoordinateSystemParam())
48            {
49                coordinateSystemFragment.setCoordSystemType(ProjectManage.GetInstance().getUseCoordSystemTy
50                pe());
```

```
1         if          (coordinateSystemFragment. getCoordSystemType () ==  
2  eCoordinateSystemType. SYSTEM_TYPE_LOCAL)  
3          {  
4  coordinateSystemFragment. setCoordinateSystemParameter (ProjectCoordSystem. GetInstance (). getCo  
5  ordSystemParameter ());  
6          }  
7          else      if      (coordinateSystemFragment. getCoordSystemType () ==  
8  eCoordinateSystemType. SYSTEM_TYPE_RTCM)  
9          {  
10 coordinateSystemFragment. setRtcmCoordinateSystemParameter (ProjectCoordSystem. GetInstance ().  
11 getRtcmCoordSystemParameter ());  
12          }  
13          }  
14          else {  
15  coordinateSystemFragment. setCoordSystemType (eCoordinateSystemType. SYSTEM_TYPE_LOCAL);  
16          tagCoordinateSystemParameter systemParameter = new tagCoordinateSystemParameter ();  
17          if (AppFinalUtil. isLanguageZhCh ())  
18          {  
19              systemParameter. setName ("CGCS2000");  
20              tagEllipsoidParameter ellipsoidParameter = new tagEllipsoidParameter ();  
21              ellipsoidParameter. setName ("CGCS2000");  
22              ellipsoidParameter. setDf (298. 257222101);  
23              ellipsoidParameter. setDa (6378137);  
24              systemParameter. setEllipsoidParam (ellipsoidParameter);  
25          }  
26          else {  
27              systemParameter. setName ("Default");  
28          }  
29          coordinateSystemFragment. setCoordinateSystemParameter (systemParameter);  
30      }  
31  }  
32 }  
33 @Override  
34 public void onPageSelected (int i) {  
35 }  
36 @Override  
37 public void onPageScrollStateChanged (int i) {  
38 }  
39 @Override  
40 public void onClick (View v) {  
41     switch (v. getId ()) {  
42         case R. id. button_OK: {  
43             if (!basicInfoFragment. testProjectName ())  
44             {  
45                 ViewPager viewPager = findViewById (R. id. viewPager_Fragment);  
46                 viewPager. setCurrentItem (0);  
47                 basicInfoFragment. setTextViewFocus (R. id. editText_ProjectName);  
48                 return;  
49             }  
50             if (!createProject ())
```

```
1         {
2             return;
3         }
4         setResult(AppFinalUtil.RETURN_CODE_DEFAULT);
5         finish();
6     }
7     break;
8     case R.id.button_Pre:
9     {
10        ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
11        viewPager.setCurrentItem(0);
12    }
13    break;
14    case R.id.button_Next:
15    {
16        ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
17        viewPager.setCurrentItem(1);
18    }
19    break;
20    case R.id.button_Cancel:
21    {
22        finish();
23    }
24    break;
25    default:
26        break;
27    }
28}
29@Override
30 public void onActivityResult(int requestCode, int resultCode, Intent data) {
31     ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
32     mFragmentAdapter.getItem(viewPager.getCurrentItem()).onActivityResult(requestCode&0xFFFF,
33     resultCode, data);
34 }
35 private boolean createProject()
36 {
37     String strProjectPath = basicInfoFragment.getProjectPath();
38     String strProjectName = basicInfoFragment.getProjectName();
39     String strOperator = basicInfoFragment.getOperator();
40     String strRemark = basicInfoFragment.getRemark();
41     String strCreateTime = basicInfoFragment.getCreateTime();
42     eCoordinateSystemType systemType = coordinateSystemFragment.getCoordSystemType();
43     tagCoordinateSystemParameter          coordinateSystemParameter
44     coordinateSystemFragment.getCoordinateSystemParameter();
45     BaseChangeCorrectParameter correctParameter = new BaseChangeCorrectParameter();
46     tagGnssRefStationItem refStationItem = null;
47     if (basicInfoFragment.isRetainBaseCorrectParam())
48     {
49         correctParameter.set(ConfigBaseCorrect.getInstance());
50         refStationItem
```

```
1 ProjectDbFileManager. getInstance(). getRefStationData(correctParameter.strBaseKeyId);
2     }
3     if (!ProjectManage. GetInstance(). createProject(strProjectPath, strProjectName,
4             strOperator, strRemark, strCreateTime, systemType, coordinateSystemParameter))
5     {
6         return false;
7     }
8     if (systemType == eCoordinateSystemType. SYSTEM_TYPE_RTCM)
9     {
10    ProjectCoordSystem. GetInstance(). setRtcCoordSystemParameter(coordinateSystemFragment. getRt
11    cmCoordinateSystemParameter());
12    }
13    if (refStationItem != null)
14    {
15        ProjectDbFileManager. getInstance(). insertRefStationInfo(refStationItem);
16    }
17    if (correctParameter.isValid())
18    {
19        ProjectDbFileManager. getInstance(). insertBaseCorrectParameter(correctParameter);
20    }
21    if (!correctParameter.equals(ConfigBaseCorrect. getInstance())) {
22        ConfigBaseCorrect. getInstance(). set(correctParameter);
23        ConfigBaseCorrect. getInstance(). saveConfig();
24    }
25    return true;
26 }
27 public void onEventMainThread(MainEvent. UpdateRtcParam obj) {
28     tagRtcCoordinateSystemParameter          coordinateSystemParameter      =
29     coordinateSystemFragment. getRtcCoordSystemParameter();
30     tagRtcCoordinateSystemParameter          rtcSystemParameter           =
31     ProjectCoordSystem. GetInstance(). getRtc31Convert(). getRtcCoordSystemParameter();
32     if (coordinateSystemParameter. getUseSrcEllipsoidRtc())
33     {
34         coordinateSystemParameter. setSrcEllipsoidVaild(rtcSystemParameter. getSrcEllipsoidVaild());
35         coordinateSystemParameter. setSrcEllipsoidParam(rtcSystemParameter. getSrcEllipsoidParam());
36     }
37     if (coordinateSystemParameter. getUseTargetEllipsoidRtc())
38     {
39         coordinateSystemParameter. setTargetEllipsoidVaild(rtcSystemParameter. getTargetEllipsoidVai
40         ld());
41         coordinateSystemParameter. setTargetEllipsoidParam(rtcSystemParameter. getTargetEllipsoidPar
42         am());
43     }
44     if (coordinateSystemParameter. getUseProjectRtc())
45     {
46         coordinateSystemParameter. setProjectVaild(rtcSystemParameter. getProjectVaild());
47         coordinateSystemParameter. setProjectParam(rtcSystemParameter. getProjectParam());
48     }
49     if (coordinateSystemParameter. getUseServerRtc())
50     {
```

```
1     coordinateSystemParameter.setServerValid(rtcmSystemParameter.getServerValid());
2     coordinateSystemParameter.setDatumParam(rtcmSystemParameter.getDatumParam());
3 }
4     if (coordinateSystemParameter.getUseGridRtcm())
5     {
6         coordinateSystemParameter.setGridValid(rtcmSystemParameter.getGridValid());
7         coordinateSystemParameter.setGridParam(rtcmSystemParameter.getGridParam());
8     }
9     coordinateSystemFragment.setRtcmCoordinateSystemParameter(coordinateSystemParameter);
10    coordinateSystemFragment.updateValueToUI();
11}
12}
13 public class ProjectManage extends ProjectConfig
14{
15     private static ProjectManage mProjectManage = null;
16     public static ProjectManage GetInstance()
17     {
18         if (null == mProjectManage)
19         {
20             mProjectManage = new ProjectManage();
21             mProjectManage.initializeXSurvey();
22         }
23         return mProjectManage;
24     }
25     private void initializeXSurvey()
26     {
27         mstrProgramPath = getDefaultProgramPath();
28         loadProjectConfig();
29         IoFileManage.createDirectory(mstrProgramPath);
30         mstrLastProjectPath = getProgramProjectPath();
31         IoFileManage.createDirectory(mstrLastProjectPath);
32         IoFileManage.createDirectory(getProgramConfigPath());
33         IoFileManage.createDirectory(getProgramDebugPath());
34         IoFileManage.createDirectory(getProgramImportPath());
35         IoFileManage.createDirectory(getProgramExportPath());
36         IoFileManage.createDirectory(getProgramMapPath());
37         IoFileManage.createDirectory(getProgramDataPath());
38         IoFileManage.createDirectory(getProgramGeoidPath());
39         IoFileManage.createDirectory(getProgramInstallationPath());
40     }
41     public boolean loadLastProject()
42     {
43         if (mProjectItemList.size() > 0)
44             return openProject(mProjectItemList.get(0).strProjectFilePath);
45         return false;
46     }
47     public void removeProjectItem(String strProjectFilePath)
48     {
49         for (int i = mProjectItemList.size()-1; i >= 0; i--)
50         {
```

```
1      if (mProjectItemList.get(i).strProjectFilePath.equalsIgnoreCase(strProjectFilePath))
2      {
3          mProjectItemList.remove(i);
4          saveLastProjectName();
5      }
6  }
7 }
8 public String getProjectPath()
9 {
10     return mstrLastProjectPath;
11 }
12 public boolean createProject(String strProjectPath, String strProjectName, String
13 strOperator, String strRemark, String strCreateTime,
14                     eCoordinateSystemType systemType, tagCoordinateSystemParameter
15 systemParameter)
16 {
17     File temFile = new File(strProjectPath + "/" + strProjectName);
18     if (temFile.exists())
19     {
20         return false;
21     }
22     IoFileManage.createDirectory(strProjectPath + "/" + strProjectName);
23     closeProject();
24     setOperator(strOperator);
25     setRemark(strRemark);
26     setCreateTime(strCreateTime);
27     String strProjectPathName = strProjectPath + "/" + strProjectName + "/config.job";
28     if (!saveConfig(strProjectPathName))
29     {
30         return false;
31     }
32     misOpenProject = true;
33     mstrLastProjectPath = strProjectPath;
34     mstrProjectName = strProjectName;
35     IoFileManage.createDirectory(getProjectDataDirectory());
36     IoFileManage.createDirectory(getProjectConfigDirectory());
37     String strDataFilePath = getProjectDirectory() + "/" + "surveydata.db";
38     ProjectDbFileManager.getInstance().createSQLiteDB(strDataFilePath);
39     setUseCoordSystemType(systemType);
40     ProjectCoordSystem.GetInstance().setConfigPath(getProjectDirectory() + "/" +
41 "coordparam.sys");
42     if (systemType == eCoordinateSystemType.SYSTEM_TYPE_LOCAL) {
43         ProjectCoordSystem.GetInstance().setCoordSystemParameter(systemParameter);
44         ProjectCoordSystem.GetInstance().Save();
45     }
46     loadConfig();
47     ConfigConvertParam.getInstance().initConfig();
48     ConfigStakeoutPoint.getInstance().initConfig();
49     tagProjectItem projectItem = new tagProjectItem();
50     projectItem.strProjectName = strProjectName;
```

```
1     projectItem.strProjectFilePath = strProjectPathName;
2     projectItem.strLastTime      =      StringFunction.formatDate("yyyy-MM-dd HH:mm:ss",
3     Calendar.getInstance().getTime());
4     projectItem.strCreateTime = getCreateTime();
5     projectItem.strOperator = getOperator();
6     if (mProjectItemList.size() > 0)
7         mProjectItemList.add(0, projectItem);
8     else
9         mProjectItemList.add(projectItem);
10    saveLastProjectName();
11    return true;
12 }
13 public boolean renameProject(String strProjectName)
14 {
15     String strTempProjectName = getProjectName();
16     File tempFile = new File(getProjectPath() + "/" + strProjectName);
17     if (tempFile.exists())
18     {
19         return false;
20     }
21     ProjectDbFileManager.getInstance().closeSQLiteDB();
22     File oldFile = new File(getProjectPath() + "/" + strTempProjectName);
23     oldFile.renameTo(tempFile);
24     mstrProjectName = strProjectName;
25     oldFile = new File(StringFunction.format("%s/%s.bck", getProgramDataPath(),
26 strTempProjectName));
27     if (oldFile.exists())
28     {
29         tempFile = new File(StringFunction.format("%s/%s.bck", getProgramDataPath(),
30 strProjectName));
31         oldFile.renameTo(tempFile);
32     }
33     String strDataFilePath = getProjectDirectory() + "/" + "surveydata.db";
34     ProjectDbFileManager.getInstance().openSQLiteDB(strDataFilePath);
35     String strProjectPathName = getProjectPath() + "/" + strTempProjectName + "/config.job";
36     for (int i = mProjectItemList.size()-1; i >= 0; i--)
37     {
38         if (mProjectItemList.get(i).strProjectFilePath.equalsIgnoreCase(strProjectPathName))
39         {
40             tagProjectItem projectItem = mProjectItemList.get(i);
41             strProjectPathName = getProjectPath() + "/" + strProjectName + "/config.job";
42             projectItem.strProjectName = mstrProjectName;
43             projectItem.strProjectFilePath = strProjectPathName;
44             projectItem.strLastTime = StringFunction.formatDate("yyyy-MM-dd HH:mm:ss",
45             Calendar.getInstance().getTime());
46             saveLastProjectName();
47         }
48     }
49 }
50 public boolean openProject(String strProjectPathName)
```

```
1  {
2      if (!loadConfig(strProjectPathName))
3          return false;
4      strProjectPathName = strProjectPathName.replace("//", "/");
5      String strTem = strProjectPathName.substring(0, strProjectPathName.lastIndexOf('/'));
6      mstrLastProjectPath = strTem.substring(0, strTem.lastIndexOf('/'));
7      mstrProjectName = strTem.substring(strTem.lastIndexOf('/') + 1);
8      IoFileManage.createDirectory(getProjectDataDirectory());
9      String strDataFilePath = getProjectDirectory() + "/" + "surveydata.db";
10     ProjectDbFileManager.getInstance().openSQLiteDB(strDataFilePath);
11     setUseEncrypt(isCoordinateSystemParEncrypt());
12     loadConfig();
13     ProjectCoordSystem.GetInstance().setUseCoordSystemType(getUseCoordSystemType());
14     IoFileManage.createDirectory(getProjectConfigDirectory());
15     removeProjectItem(strProjectPathName);
16     tagProjectItem projectItem = new tagProjectItem();
17     projectItem.strProjectName = mstrProjectName;
18     projectItem.strProjectFilePath = strProjectPathName;
19     projectItem.strLastTime = StringFunction.formatDate("yyyy-MM-dd HH:mm:ss",
20     Calendar.getInstance().getTime());
21     projectItem.strCreateTime = getCreateTime();
22     projectItem.strOperator = getOperator();
23     if (mProjectItemList.size() > 0)
24         mProjectItemList.add(0, projectItem);
25     else
26         mProjectItemList.add(projectItem);
27     saveLastProjectName();
28     misOpenProject = true;
29     return true;
30 }
31 public void setUseEncrypt(boolean bEncrypt)
32 {
33     setCoordinateSystemParEncrypt(bEncrypt);
34     Save();
35     ProjectCoordSystem.GetInstance().loadConfig(getProjectDirectory() + "/coordparam.sys");
36 }
37 public void setUseCoordSystemType(eCoordinateSystemType nType) {
38     super.setUseCoordSystemType(nType);
39     if (isOpenProject()) {
40         Save();
41     }
42     ProjectCoordSystem.GetInstance().setUseCoordSystemType(nType);
43 }
44 public boolean InputPassword(String strPassword)
45 {
46     return ProjectCoordSystem.GetInstance().inputPassword(strPassword);
47 }
48 @Override
49 public void setOperator(String strOperator) {
50     if (isOpenProject())
```

```
1      {
2          if (mProjectItemList.size() > 0)
3              mProjectItemList.get(0).strOperator = strOperator;
4              saveLastProjectName();
5      }
6      super.setOperator(strOperator);
7  }
8  public void Save()
9  {
10     String strProjectPathName = mstrLastProjectPath + "/" + mstrProjectName + "/config.job";
11     saveConfig(strProjectPathName);
12 }
13 private void loadConfig()
14 {
15     ConfigConvertParam.getInstance().loadConfig();
16     ConfigRecord.getInstance().loadConfig();
17     ConfigMapConvert.getInstance().loadConfig();
18     ConfigCadEdit.getInstance().loadConfig();
19     ConfigStakeoutPoint.getInstance().loadConfig();
20     ConfigDisplayInfoManage.getInstance().loadConfig();
21 }
22 public void closeProject()
23 {
24     String strDataFilePath = getProjectDirectory() + "/" + "surveydata.db";
25     ProjectDbFileManager.getInstance().closeSQLiteDB();
26     MediaScannerConnection.scanFile(AppFinalUtil.activityCurrent,
27         new String[] { strDataFilePath }, null, null);
28     misOpenProject = false;
29     mstrProjectName = "";
30     clear();
31 }
32 public String getProjectName() {
33     return mstrProjectName;
34 }
35 public boolean isOpenProject()
36 {
37     return misOpenProject;
38 }
39 public ArrayList<tagProjectItem> getProjectItemList()
40 {
41     return mProjectItemList;
42 }
43 public String getProjectDirectory()
44 {
45     return getProjectPath() + "/" + mstrProjectName;
46 }
47 public String getProjectDataDirectory()
48 {
49     return getProjectDirectory() + "/Data";
50 }
```

```
1  public String getProjectConfigDirectory()
2  {
3      return getProjectDirectory() + "/Config";
4  }
5  public String getProjectGisImagesDirectory() {
6      return getProjectDirectory() + "/Images";
7  }
8  public String getProjectGisFileDirectory() {
9      return getProjectDirectory() + "/Files";
10 }
11 public String getDefaultProgramPath()
12 {
13     String strPathProgram = Environment.getExternalStorageDirectory().getAbsolutePath() +
14     AppFinalUtil.getAppID().getAppDirectory();
15     return strPathProgram;
16 }
17 public String getProgramProjectPath()
18 {
19     String strProjectPath = getProjectPath();
20     if (strProjectPath == null || strProjectPath.length() <= 0)
21     {
22         strProjectPath = mstrProgramPath + "/Project";
23     }
24     return strProjectPath;
25 }
26 public String getProgramConfigPath()
27 {
28     return mstrProgramPath + "/Config";
29 }
30 public String getProgramDebugPath()
31 {
32     return mstrProgramPath + "/Debug";
33 }
34 public String getProgramDataPath()
35 {
36     return mstrProgramPath + "/Data";
37 }
38 public String getProgramImportPath()
39 {
40     return mstrProgramPath + "/Import";
41 }
42 public String getProgramExportPath()
43 {
44     return mstrProgramPath + "/Export";
45 }
46 public String getProgramMapPath()
47 {
48     return mstrProgramPath + "/Map";
49 }
50 public String getProgramGeoidPath() {
```

```
1     return mstrProgramPath + "/Geoid";
2 }
3     public String getProgramInstallationPath() {
4         return mstrProgramPath + "/Installation";
5     }
6     public String getProgramCachePath() {
7         return mstrProgramPath + "/.Cache";
8     }
9     private void loadProjectConfig()
10    {
11        mProjectItemList.clear();
12        String programConfigFile = getProgramConfigPath() + "/projectInfo.ini";
13        CommonFile temFile = new CommonFile(programConfigFile);
14        CBufferData temBufferData = temFile.openReadAll(CommonFile.FORMAT_UTF8);
15        if (temBufferData == null)
16            return;
17        CParseString temParseString = new CParseString();
18        String strLine;
19        while ((strLine = temBufferData.ReadLine()) != null) {
20            if (strLine.isEmpty())
21                continue;
22            if(strLine.contains(", "))
23                strLine = strLine.replaceAll(", ", ", ");
24            int nCount = temParseString.split(strLine, ", ");
25            if (nCount < 4) {
26                continue;
27            }
28            tagProjectItem item = new tagProjectItem();
29            item.strProjectName = temParseString.getValueString(0);
30            item.strProjectFilePath = temParseString.getValueString(1);
31            item.strLastTime = temParseString.getValueString(2);
32            item.strCreateTime = temParseString.getValueString(3);
33            item.strOperator = temParseString.getValueString(4);
34            mProjectItemList.add(item);
35        }
36    }
37     private void saveLastName()
38    {
39        String programConfigFile = getProgramConfigPath() + "/projectInfo.ini";
40        CommonFile temFile = new CommonFile(programConfigFile);
41        if(temFile.exist())
42        {
43            temFile.delete();
44        }
45        if (temFile.openWrite())
46        {
47            tagProjectItem item;
48            for (int i = 0; i < mProjectItemList.size(); i++)
49            {
50                item = mProjectItemList.get(i);
```

```
1      String strLine = StringFunction.format("%s, %s, %s, %s, %s\r\n", item.strProjectName,
2      item.strProjectFilePath, item.strLastTime, item.strCreateTime, item.strOperator);
3      temFile.write(strLine);
4  }
5  temFile.close();
6 }
7 }
8 private boolean misOpenProject = false;
9 private String mstrLastProjectPath = "";
10 private String mstrProjectName = "";
11 private String mstrProgramPath = "";
12 private ArrayList<tagProjectItem> mProjectItemList = new ArrayList<>();
13 }
14 public class PointLibraryActivityV2 extends CommonBaseFragmentActivity implements
15 PointCommonFragment.OnChangeListener{
16     public static ArrayList<Long> cSelectPointIdItems = null;
17     private ePointLibraryMode pointLibraryMode = ePointLibraryMode.MODE_NULL;
18     private StakePointPreviewFragment pointPreviewFragment = null;
19     private CommonFragmentAdapter mFragmentAdapter;
20     protected void onCreate(Bundle savedInstanceState) {
21         super.onCreate(savedInstanceState);
22         setContentView(R.layout.activity_point_library_v2);
23         int mode = getIntent().getIntExtra("PointLibraryMode", -1);
24         pointLibraryMode = ePointLibraryMode.swigToEnum(mode);
25         initClickListener(R.id.imageButton_Mode, new View.OnClickListener() {
26             @Override
27             public void onClick(View v) {
28                 ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
29                 CommonV4Fragment commonV4Fragment = =
30                 mFragmentAdapter.getItem(viewPager.getCurrentItem());
31                 if (commonV4Fragment instanceof PointListCommonFragment) {
32                     boolean bDisplayList = =
33                     ((PointListCommonFragment) commonV4Fragment).isDisplayList();
34                     ((PointListCommonFragment) commonV4Fragment).setDisplayMode(!bDisplayList);
35                     ImageView imageViewMode = findViewById(R.id.imageButton_Mode);
36                     imageViewMode.setImageResource(bDisplayList?R.drawable.icon_point_mode_list:R.drawable.ic
37                     on_point_mode_grid);
38                 }
39             }
40         });
41         mFragmentAdapter = new CommonFragmentAdapter(getSupportFragmentManager());
42         switch (pointLibraryMode)
43         {
44             case MODE_NULL:
45                 mFragmentAdapter.addFragment(new PointLibraryFragment(this));
46                 break;
47             case MODE_POINT_STAKEOUT: {
48                 setTitle(getString(R.string.title_point_stakeout));
49                 boolean bReturnToSurveyMain = =
50                 getIntent().getBooleanExtra("ReturnToSurveyMain", false);
```

```
1      PointLibraryFragment pointFragment = new PointLibraryFragment(this);
2      pointFragment.setStakeoutReturnToMain(bReturnToSurveyMain);
3      PointLibraryStakePointFragment stakePointFragment = new
4      PointLibraryStakePointFragment(this);
5      stakePointFragment.setStakeoutReturnToMain(bReturnToSurveyMain);
6      mFragmentAdapter.addFragment(pointFragment);
7      mFragmentAdapter.addFragment(stakePointFragment);
8      pointPreviewFragment = new StakePointPreviewFragment();
9      mFragmentAdapter.addFragment(pointPreviewFragment);
10     break;
11 }
12 case MODE_SELECT_POINT: {
13     setTitle(getString(R.string.title_coordinate_select));
14     PointLibraryFragment pointFragment = new PointLibraryFragment(this);
15     pointFragment.setSimpleSelect(true);
16     mFragmentAdapter.addFragment(pointFragment);
17     mFragmentAdapter.addFragment(new PointLibraryInputFragment(this));
18     break;
19 }
20 case MODE_SELECT_INPUT_POINT: {
21     setTitle(getString(R.string.title_coordinate_select));
22     PointLibraryFragment pointFragment = new PointLibraryFragment(this);
23     pointFragment.setSimpleSelect(true);
24     mFragmentAdapter.addFragment(pointFragment);
25     mFragmentAdapter.addFragment(new PointLibraryInputFragment(this));
26     break;
27 }
28 case MODE_SELECT_STAKE_POINT_LIST: {
29     setTitle(getString(R.string.title_coordinate_batch_select));
30     mFragmentAdapter.addFragment(new PointLibrarySelectStakeListFragment(this));
31     break;
32 }
33 case MODE_SELECT_POINT_LIST: {
34     setTitle(getString(R.string.title_coordinate_batch_select));
35     mFragmentAdapter.addFragment(new PointLibrarySelectListFragment(this));
36     break;
37 }
38 case MODE_SELECT_RESTORE_DELETE_POINT: {
39     setTitle(getString(R.string.title_restore_data));
40     mFragmentAdapter.addFragment(new PointLibraryRestoreDeletePointFragment(this));
41     break;
42 }
43 default: {
44     mFragmentAdapter.addFragment(new PointLibraryFragment(this));
45     break;
46 }
47 }
48 ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
49 viewPager.setAdapter(mFragmentAdapter);
50 TabLayout tabLayout = findViewById(R.id.tabLayout_Fragment);
```

```
1  tabLayout.setupWithViewPager(viewPager);
2  if (mFragmentAdapter.getCount() <= 1)
3      tabLayout.setVisibility(View.GONE);
4  switch (pointLibraryMode)
5  {
6      case MODE_POINT_STAKEOUT:
7      case MODE_SELECT_INPUT_POINT:
8          viewPager.setCurrentItem(1);
9          break;
10 }
11 {
12     viewPager.addOnPageChangeListener(new ViewPager.OnPageChangeListener() {
13         @Override
14         public void onPageScrolled(int i, float v, int i1) {
15             NoScrollViewPager viewPager = findViewById(R.id.viewPager_Fragment);
16             CommonV4Fragment commonV4Fragment = =
17             mFragmentAdapter.getItem(viewPager.getCurrentItem());
18             if (pointPreviewFragment != null) {
19                 viewPager.setNoScroll(commonV4Fragment == pointPreviewFragment);
20                 if (commonV4Fragment == pointPreviewFragment) {
21
22                 pointPreviewFragment.setPointItems(PointLibraryManage.getInstance().getStakePointList());
23                     }
24                     }
25                     if (commonV4Fragment instanceof PointListCommonFragment)
26                     {
27                         setVisibility(R.id.linearLayout_DisplayMode, View.VISIBLE);
28                     }
29                     else {
30                         setVisibility(R.id.linearLayout_DisplayMode, View.GONE);
31                     }
32                     commonV4Fragment.updateValueToUI();
33                 }
34             @Override
35             public void onPageSelected(int i) {
36             }
37             @Override
38             public void onPageScrollStateChanged(int i) {
39             }
40         });
41     }
42 }
43 @Override
44 public void finish()
45 {
46     ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
47     CommonV4Fragment commonV4Fragment = =
48     mFragmentAdapter.getItem(viewPager.getCurrentItem());
49     if (commonV4Fragment instanceof PointCommonFragment) {
50         if (((PointCommonFragment)
```

```
1 mFragmentAdapter.getItem(viewPager.getCurrentItem()).cancelBatchSelectMode())
2         return;
3     }
4     super.finish();
5 }
6 @Override
7 public void onActivityResult(int requestCode, int resultCode, Intent data) {
8     ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
9     mFragmentAdapter.getItem(viewPager.getCurrentItem()).onActivityResult(requestCode&0xFFFF,
10 resultCode, data);
11 }
12 @Override
13 public void onChanged() {
14     ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
15     for (int i=0; i<mFragmentAdapter.getCount(); i++)
16     {
17         if (i!= viewPager.getCurrentItem())
18         {
19             CommonV4Fragment commonV4Fragment = mFragmentAdapter.getItem(i);
20             if (commonV4Fragment instanceof PointCommonFragment) {
21                 ((PointCommonFragment) commonV4Fragment).setDataReLoad();
22             }
23         }
24     }
25 }
26 @Override
27 public void importFileFinish(boolean success) {
28     mHandler.sendEmptyMessage(success?0:1);
29 }
30 @Override
31 public void showWaitingDialog(boolean isShow)
32 {
33     mHandler.sendEmptyMessage(isShow?5:6);
34 }
35 @Override
36 public void promptRepetitionName() {
37     mHandler.sendEmptyMessage(8);
38 }
39 @Override
40 public void searchFinish() {
41     mHandler.sendEmptyMessage(7);
42 }
43 @SuppressLint("HandlerLeak")
44 Handler mHandler = new Handler()
45 {
46     public void handleMessage(Message msg)
47     {
48         switch (msg.what)
49         {
50             case 0: {
```

```
1     makeTextString(R.string.string_prompt_import_file_succeed);
2    setVisibility(R.id.waittingLayout, View.GONE);
3     ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
4     CommonV4Fragment commonV4Fragment = =
5     mFragmentAdapter.getItem(viewPager.getCurrentItem());
6     if (commonV4Fragment instanceof PointCommonFragment)
7         ((PointCommonFragment) commonV4Fragment).setDataReLoad();
8     commonV4Fragment.updateValueToUI();
9     onChanged();
10    }
11    break;
12    case 1:
13        makeTextString(R.string.string_prompt_import_file_failed);
14       .setVisibility(R.id.waittingLayout, View.GONE);
15        break;
16    case 2: {
17        makeTextString(R.string.string_prompt_export_file_succeed);
18       .setVisibility(R.id.waittingLayout, View.GONE);
19    }
20    break;
21    case 3:
22        makeTextString(R.string.string_prompt_export_file_failed);
23       .setVisibility(R.id.waittingLayout, View.GONE);
24        break;
25    case 5:
26       .setVisibility(R.id.waittingLayout, View.VISIBLE);
27        break;
28    case 6:
29       .setVisibility(R.id.waittingLayout, View.GONE);
30        break;
31    case 7:
32    {
33        ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
34        CommonV4Fragment commonV4Fragment = =
35     mFragmentAdapter.getItem(viewPager.getCurrentItem());
36     commonV4Fragment.updateValueToUI();
37    .setVisibility(R.id.waittingLayout, View.GONE);
38    }
39    break;
40    case 8: {
41       .setVisibility(R.id.waittingLayout, View.GONE);
42        new CustomDialog(AppFinalUtil.activityCurrent, R.string.string_prompt
43            , R.string.string_prompt_point_name_repetition_prompt
44            , R.string.button_continue, R.string.button_cancel)
45            .setDialogListener(new CustomDialog.OnDialogListener() {
46                @Override
47                public void onPositiveClick(View customView, DialogInterface
48 dialogInterface, int which) {
49                    ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
```

```
1             CommonV4Fragment           commonV4Fragment
2     mFragmentAdapter.getItem(viewPager.getCurrentItem());
3         if (commonV4Fragment instanceof PointCommonFragment)
4             ((PointCommonFragment) commonV4Fragment).importPointFinish();
5     }
6         @Override
7             public void onNegativeClick(View customView, DialogInterface
8 dialogInterface, int which) {
9                 }
10            }).showDialog();
11        }
12        break;
13    default:
14        break;
15    }
16}
17};
18}
19public class PointLibraryFragment extends PointListCommonFragment {
20    private boolean mbStakeoutEnable = false;
21    private boolean mbSimpleSelect = false;
22    private boolean mbReturnToSurveyMain = false;
23    public PointLibraryFragment(OnChangeListener listener) {
24        super(listener);
25    }
26    public void setStakeoutReturnToMain(boolean bReturnToSurveyMain)
27    {
28        mbStakeoutEnable = true;
29        mbReturnToSurveyMain = bReturnToSurveyMain;
30    }
31    public void setSimpleSelect(boolean bSimple)
32    {
33        mbSimpleSelect = bSimple;
34    }
35    @Override
36    public String getTitle() {
37        return AppFinalUtil.getString(R.string.title_library_coordinate_point);
38    }
39    protected void initCustom()
40    {
41        super.initCustom();
42        ((CustomGridPointItemAdapter)mGridItemListAdapter).setStakeoutMode(mbStakeoutEnable);
43        ((CustomGridPointItemAdapter)mGridItemListAdapter).setInvertedOrder(true);
44        mGridItemListAdapter.setEnableBatchSelect(!mbReturnToSurveyMain);
45        mGridItemListAdapter.setItemButtonVisible(!mbReturnToSurveyMain);
46    }
47    @Override
48    protected void loadSearchData(ePointQueryType type, String strFind)
49    {
50        mAllPointListArray.clear();
```

```
1 mAllPointListArray.addAll(ProjectDbFileManager.getInstance().queryFindPointDataIds(type,
2 strFind));
3 }
4 @Override
5 public void onClickItem(int position)
6 {
7     if (mbSimpleSelect)
8     {
9         if (position >= 0) {
10            long pointId = mAllPointListArray.get(position);
11            Intent intent = new Intent();
12            intent.putExtra("ObjectID", pointId);
13            getActivity().setResult(AppFinalUtil.RETURN_CODE_VALUE_BACK, intent);
14            getActivity().finish();
15        }
16    }
17    else {
18        if (!mGridItemListAdapter.isBatchSelectMode() &&
19            !mbReturnToSurveyMain && !mbStakeoutEnable &&
20            mGridItemListAdapter.getSelectedPosition() <= 0)
21        {
22            onClickEdit(position);
23        }
24        else {
25            super.onClickItem(position);
26        }
27    }
28 }
29 @Override
30 public void onClickApply() {
31     if (mbStakeoutEnable) {
32         int selectedIndex = mGridItemListAdapter.getSelectedPosition();
33         if (ConfigStakeoutPoint.getInstance().isAutoStakeout()) {
34             ConfigStakeoutPoint.getInstance().setAutoStakeout(false);
35             ConfigStakeoutPoint.getInstance().saveConfig();
36         }
37
38         long pointId = mAllPointListArray.get(selectedIndex);
39         PointLibraryManage.getInstance().setStakeEntity(pointId);
40         if (!mbReturnToSurveyMain) {
41             Intent intent = new Intent(getActivity(), MainPointSurveyActivity.class);
42             intent.putExtra(MainPointSurveyActivity.strSurveyWordModeId,
43 eSurveyWorkMode.WORK_MODE_STAKEOUT_POINT.swigValue());
44             startActivity(intent);
45         }
46         getActivity().finish();
47     }
48 }
49 @Override
50 public int getHeaderLayout() {
```

```
1     return R.layout.header_project_data_view;
2 }
3 @Override
4 public ArrayList<TextView> getHeadTextViews(View convertView) {
5     ArrayList<TextView> textViews = new ArrayList<>();
6     TextView temTextView = convertView.findViewById(R.id.textView_point_type);
7     textViews.add(temTextView);
8     temTextView = convertView.findViewById(R.id.textView_Name);
9     textViews.add(temTextView);
10    if (ConfigSystem.getInstance().isDisplayNorthFirst()) {
11        temTextView = convertView.findViewById(R.id.textView_North);
12        textViews.add(temTextView);
13        temTextView = convertView.findViewById(R.id.textView_East);
14        textViews.add(temTextView);
15    } else {
16        temTextView = convertView.findViewById(R.id.textView_East);
17        textViews.add(temTextView);
18        temTextView = convertView.findViewById(R.id.textView_North);
19        textViews.add(temTextView);
20    }
21    temTextView = convertView.findViewById(R.id.textView_Height);
22    textViews.add(temTextView);
23    temTextView = convertView.findViewById(R.id.textView_Latitude);
24    textViews.add(temTextView);
25    temTextView = convertView.findViewById(R.id.textView_Longitude);
26    textViews.add(temTextView);
27    temTextView = convertView.findViewById(R.id.textView_Altitude);
28    textViews.add(temTextView);
29    temTextView = convertView.findViewById(R.id.textView_Code);
30    textViews.add(temTextView);
31    temTextView = convertView.findViewById(R.id.textView_Mileage);
32    textViews.add(temTextView);
33    temTextView = convertView.findViewById(R.id.textView_Offset);
34    textViews.add(temTextView);
35    temTextView = convertView.findViewById(R.id.textView_BaseDistance);
36    textViews.add(temTextView);
37    temTextView = convertView.findViewById(R.id.textView_DateTime);
38    textViews.add(temTextView);
39    return textViews;
40 }
41 @Override
42 public int getDataSize() {
43     return mAllPointListArray.size();
44 }
45 @Override
46 public ArrayList<String> getDataByIndex(int index) {
47     if (index < 0 || index >= getDataSize())
48         return new ArrayList<>();
49     tagPointNode           pointNode
50     ProjectDbFileManager.getInstance().queryPointNode(mAllPointListArray.get(getDataSize()) = -
```

```
1 index - 1), true);
2     ArrayList<String> arrayList = new ArrayList<>();
3     arrayList.add(pointNode.getPointType().swigValue() + "");
4     arrayList.add(pointNode.strPointName);
5     eLengthUnitType unitType = ConfigSystem.getInstance().getLengthUnitType();
6     eAngleFormatType angleFormatType = ConfigSystem.getInstance().getAngleFormatType();
7     tagBLHCoord blhCoord = pointNode.getBLHCoord();
8     tagNEhCoord nehCoord = pointNode.getNehCoord();
9     if (ConfigSystem.getInstance().isDisplayNorthFirst()) {
10         arrayList.add(StringFunction.valueOf(unitType.getLength(nehCoord.getNorth())));
11         arrayList.add(StringFunction.valueOf(unitType.getLength(nehCoord.getEast())));
12     } else {
13         arrayList.add(StringFunction.valueOf(unitType.getLength(nehCoord.getEast())));
14         arrayList.add(StringFunction.valueOf(unitType.getLength(nehCoord.getNorth())));
15     }
16     arrayList.add(StringFunction.valueOf(unitType.getLength(nehCoord.getHeight())));
17     arrayList.add(angleFormatType.toString(blhCoord.getLatitude(),
18     eAngleFormatType.BLMODE_B));
19     arrayList.add(angleFormatType.toString(blhCoord.getLongitude(),
20     eAngleFormatType.BLMODE_L));
21     arrayList.add(StringFunction.valueOf(unitType.getLength(blhCoord.getAltitude())));
22     arrayList.add(pointNode.strPointCode);
23     if (pointNode.stakeoutData != null && pointNode.stakeoutData.dataType.swigValue() >= 10)
24     {
25         eMileageType mileageType = ConfigSystem.getInstance().getMileageType();
26         arrayList.add(mileageType.toString(pointNode.stakeoutData.dMileage));
27     arrayList.add(StringFunction.valueOf(unitType.getLength(pointNode.stakeoutData.dOffset)));
28     }
29     else {
30         arrayList.add("");
31         arrayList.add("");
32     }
33     if (pointNode.getPointType().isSurveyPoint()) {
34     arrayList.add(StringFunction.valueOf(unitType.getLength(pointNode.gnssPositionData.getDistanceToBase())));
35     }
36     else{
37         arrayList.add("");
38     }
39     arrayList.add(pointNode.getDateTime().toString());
40     return arrayList;
41 }
42 }
43 }
44 public class SurveyPointEditActivity extends Common BaseActivity
45 implements OnClickListener {
46     public static tagPointNode cEditPointNode = null;
47     byte[] bPhotoSketch = null;
48     RoverAntennaPar temAntenna = new RoverAntennaPar();
49     @Override
50     protected void onCreate(Bundle savedInstanceState)
```

```
1  {
2      super.onCreate(savedInstanceState);
3      setContentView(R.layout.activity_survey_point_edit);
4      if (cEditPointNode == null || cEditPointNode.gnssPositionData == null) {
5          finish();
6          return;
7      }
8      temAntenna.setType(cEditPointNode.gnssPositionData.getAntennaMeasureType());
9      temAntenna.setMeasureHeight(cEditPointNode.gnssPositionData.getAntennaMeasureHeight());
10     temAntenna.setAntennaInfo(cEditPointNode.gnssPositionData.getAntennaInfoData());
11     bPhotoSketch = ProjectDbFileManager.getInstance().getImageRemark(cEditPointNode.keyId);
12     if (bPhotoSketch != null)
13     {
14         Button eventImage = findViewById(R.id.button_ImageNote);
15         eventImage.setText(StringFunction.addRedPoint(eventImage.getText().toString()));
16     }
17     initialUI();
18     setTextViewFocus(R.id.editText_Name);
19 }
20 protected void initialUI()
21 {
22     setTextViewText(R.id.editText_Name, cEditPointNode.strPointName);
23     setTextViewText(R.id.editText_Code, cEditPointNode.strPointCode);
24     initClickListener(R.id.imageButton_CodeSelect, this);
25     initClickListener(R.id.button_ImageNote, this);
26     initClickListener(R.id.linearLayout_Antenna, this);
27     initClickListener(R.id.button_OK, this);
28     eLengthUnitType unitType = ConfigSystem.getInstance().getLengthUnitType();
29     String strAntennaHeight = StringFunction.format("%s+%s%s", StringFunction.valueOf(unitType.getLength(temAntenna.getMea
30 sureHeight()), true),
31     StringFunction.valueOf(unitType.getLength(temAntenna.getAntennaHeight() - temAntenna.getMeasu
32 reHeight())), unitType.getUnit());
33     setTextViewText(R.id.textView_AntennaValue, strAntennaHeight);
34     if (cEditPointNode.gnssPositionData.getSensorType().swigValue() >=
35     eSensorType.TYPE_SENSOR_INCLINE.swigValue())
36     {
37         setEnabled(R.id.linearLayout_Antenna, false);
38     }
39     displayGnssInfo();
40 }
41 @Override
42 public void onClick(View arg0) {
43     if(arg0.getId() == R.id.button_OK)
44     {
45         onButtonOK();
46     } else if(arg0.getId() == R.id.button_ImageNote)
47     {
48         Intent intent = new Intent(this, PhotoSketchActivity.class);
49         PhotoSketchActivity.bPhotoSketch = bPhotoSketch;
50         PhotoSketchActivity.cPointNode = cEditPointNode;
```

```
1     startActivityForResult(intent, R.id.button_ImageNote);
2 }
3     else if (R.id.imageButton_CodeSelect == arg0.getId()) {
4     DisplayMenuManage.getInstance().doFunctionForId(eFunctionType.FUNCTION_TYPE_CODE_LIBRARY.swigValue());
5
6     }else if (R.id.linearLayout_Antenna == arg0.getId()) {
7         Intent intent = new Intent();
8         intent.putExtra("AntennaMeasureType", temAntenna.getType().swigValue());
9         intent.putExtra("AntennaMeasureHeight", temAntenna.getMeasureHeight());
10        intent.putExtra("AntennaInfo", temAntenna.getAntennaInfo().toString());
11        intent.setClass(this, SettingRoverAntennaActivity.class);
12        startActivityForResult(intent, R.id.linearLayout_Antenna);
13    }
14 }
15 private void onButtonOK() {
16     boolean bChangeValue = false;
17     String strPointName = getTextViewString(R.id.editText_Name);
18     String strPointCode = getTextViewString(R.id.editText_Code);
19     if(!strPointName.equals(cEditPointNode.strPointName) ||
20         !strPointCode.equals(cEditPointNode.strPointCode))
21     {
22         bChangeValue = true;
23         cEditPointNode.strPointName = strPointName;
24         cEditPointNode.strPointCode = strPointCode;
25     }
26     if (cEditPointNode.gnssPositionData.getAntennaMeasureType() != temAntenna.getType() ||
27         Math.abs(cEditPointNode.gnssPositionData.getAntennaMeasureHeight() -
28             temAntenna.getMeasureHeight()) > 1E-4 ||
29         !cEditPointNode.gnssPositionData.getAntennaInfoData().toString().equals(temAnte-
30 nna.getAntennaInfo().toString()))
31     {
32         bChangeValue = true;
33         cEditPointNode.gnssPositionData.setAntennaMeasureType(temAntenna.getType());
34         cEditPointNode.gnssPositionData.setAntennaMeasureHeight(temAntenna.getMeasureHeight());
35         cEditPointNode.gnssPositionData.setAntennaInfoData(temAntenna.getAntennaInfo());
36         cEditPointNode.gnssPositionData.updateAntennaHeight();
37     }
38     if (bChangeValue)
39     {
40         Intent intent = new Intent();
41         intent.putExtra("Position", getIntent().getIntExtra("Position", -1));
42         intent.putExtra("PointType", ePointType.POINT_TYPE_SURVEY.swigValue());
43         setResult(AppFinalUtil.RETURN_CODE_VALUE_BACK, intent);
44     }
45     finish();
46 }
47 @Override
48 public boolean onKeyDown(int keyCode, KeyEvent event) {
49     if (AppFinalUtil.isSurveyKey(keyCode)) {
50         onButtonOK();
```

```
1      return true;
2  }
3  ArrayList<eFunctionType> functionTypes = new ArrayList<>();
4  functionTypes.add(eFunctionType.FUNCTION_TYPE_ANTENNA_SETTING);
5  functionTypes.add(eFunctionType.FUNCTION_TYPE_CODE_LIBRARY);
6  eFunctionType functionType = ShortCutsManage.getInstance().getFunctionType(keyCode,
7 functionTypes);
8  if (functionType != eFunctionType.FUNCTION_TYPE_NULL) {
9      DisplayMenuManage.getInstance().doFunctionForId(functionType.swigValue());
10     return true;
11 }
12     return super.onKeyDown(keyCode, event);
13 }
14 @Override
15 protected void onActivityResult(int requestCode, int resultCode, Intent data) {
16     if (R.id.linearLayout_Antenna == requestCode)
17     {
18         if (data == null)
19             return;
20     temAntenna.setType(eAntennaMeasureType.swigToEnum(data.getIntExtra("AntennaMeasureType",
21 0)));
22     temAntenna.setMeasureHeight(data.getDoubleExtra("AntennaMeasureHeight", 0));
23     DeviceInfoAntenna infoAntenna = new DeviceInfoAntenna();
24     infoAntenna.parseString(data.getStringExtra("AntennaInfo"));
25     temAntenna.setAntennaInfo(infoAntenna);
26     displayGnssInfo();
27     eLengthUnitType unitType = ConfigSystem.getInstance().getLengthUnitType();
28     String strAntennaHeight = StringFunction.format("%s+%s%s", StringFunction.valueOf(unitType.getLength(temAntenna.getMea
29 sureHeight()), true),
30 StringFunction.valueOf(unitType.getLength(temAntenna.getAntennaHeight() - temAntenna.getMeas
31 ureHeight()), unitType.getUnit()));
32     setTextViewText(R.id.textView_AntennaValue, strAntennaHeight);
33     return;
34 }
35 super.onActivityResult(requestCode, resultCode, data);
36 if (R.id.button_ImageNote == requestCode)
37 {
38     if(PhotoSketchActivity.IsModified) {
39         bPhotoSketch = PhotoSketchActivity.bPhotoSketch;
40         Button eventImage = findViewById(R.id.button_ImageNote);
41         if (bPhotoSketch != null)
42         {
43             eventImage.setText(StringFunction.addRedPoint(getString(R.string.button_image_note)));
44         }
45         else {
46             eventImage.setText(getString(R.string.button_image_note));
47         }
48         ProjectDbFileManager.getInstance().updateImageRemark(cEditPointNode.keyId,
49 PhotoSketchActivity.bPhotoSketch);
50 }
```

```
1      PhotoSketchActivity. bPhotoSketch = null;
2      }
3      }
4      if(requestCode == R.id.imageButton_CodeSelect && data!=null)
5      {
6          String strCode = data.getStringExtra("resultCode");
7          if (strCode != null)
8          {
9              setTextviewText(R.id.editText_Code, strCode);
10         }
11     }
12 }
13 public void displayGnssInfo() {
14     GnssRecordPositionData temGnssData = cEditPointNode.gnssPositionData;
15     double dAddAntennaHeight = temAntenna.getAntennaHeight() - temGnssData.getPhaseHeight();
16     String strTemString = "";
17     strTemString = StringFunction.format("%s/%d", temGnssData.getSatInLock(),
18     temGnssData.getSatInView());
19     setTextviewText(R.id.editText_SolutionState, temGnssData.getStatusMark());
20     if (strTemString.length() > 0)
21         setTextviewText(R.id.editText_SatelliteNum, String.format("(%s)", strTemString));
22     else
23         setTextviewText(R.id.editText_SatelliteNum, strTemString);
24     eLengthUnitType unitType = ConfigSystem.getInstance().getLengthUnitType();
25     eAngleFormatType angleFormatType = ConfigSystem.getInstance().getAngleFormatType();
26     CustomTextViewListLayout linearLayoutCoordinate=
27     findViewById(R.id.LinearLayout_Coordinate);
28     linearLayoutCoordinate.clear();
29     tagBLHCoord blhCoord = temGnssData.getWgs84BlhCoord();
30     tagNEhCoord temNehCoord = temGnssData.getNehCoord();
31     strTemString = angleFormatType.toString(blhCoord.getLatitude(),
32     eAngleFormatType.BLMODE_B);
33     if (ConfigSystem.getInstance().isDisplayNorthFirst())
34     linearLayoutCoordinate.add(getString(R.string.string_lat), strTemString, getString(R.string.s
35     tring_n), StringFunction.valueOf(unitType.getLength(temNehCoord.getNorth())));
36     }
37     else {
38     linearLayoutCoordinate.add(getString(R.string.string_lat), strTemString, getString(R.string.s
39     tring_e), StringFunction.valueOf(unitType.getLength(temNehCoord.getEast())));
40     }
41     strTemString = angleFormatType.toString(blhCoord.getLongitude(),
42     eAngleFormatType.BLMODE_L);
43     if (ConfigSystem.getInstance().isDisplayNorthFirst())
44     linearLayoutCoordinate.add(getString(R.string.string_lon), strTemString, getString(R.string.s
45     tring_e), StringFunction.valueOf(unitType.getLength(temNehCoord.getEast())));
46     }
47     else {
48     linearLayoutCoordinate.add(getString(R.string.string_lon), strTemString, getString(R.string.s
49     tring_n), StringFunction.valueOf(unitType.getLength(temNehCoord.getNorth())));
50     }
```

```
1 linearLayoutCoordinate.add(getString(R.string.string_alt), StringFunction.valueOf(unitType.getLength(blhCoord.getLatitude() - dAddAntennaHeight)), getString(R.string.string_h), StringFunction.valueOf(unitType.getLength(temNehCoord.getHeight() - dAddAntennaHeight)));
2
3     if (cEditPointNode.gnssPositionData != null) {
4         boolean bVaild = true;
5         CCoordinateConvert coordinateConvert = new CCoordinateConvert();
6         tagRtcmCoordinateSystemParameter          rtcmCoordinateSystemParameter      =
7         cEditPointNode.gnssPositionData.getRtcmCoordinateSystemParameter();
8
9         if (rtcmCoordinateSystemParameter != null)
10            {
11             coordinateConvert.setDestEllipsoidParameter(rtcmCoordinateSystemParameter.getTargetEllipsoidParam());
12
13             coordinateConvert.setProjectionParameter(rtcmCoordinateSystemParameter.getProjectParam());
14         }
15         else {
16             tagCoordinateSystemParameter           systemParameter      =
17             cEditPointNode.gnssPositionData.getCoordinateSystemParameter();
18             if (systemParameter != null) {
19
20                 coordinateConvert.setDestEllipsoidParameter(systemParameter.getEllipsoidParam());
21                 coordinateConvert.setProjectionParameter(systemParameter.getProjectParam());
22             }
23             else {
24                 bVaild = false;
25             }
26         }
27         if (bVaild)
28         {
29             double dDistance = CommonFunction.GetDistance(blhCoord.getLatitude() - 1E-6,
30 blhCoord.getLongitude() - 1E-6, blhCoord.getLatitude(),
31 blhCoord.getLatitude() + 1E-6, blhCoord.getLongitude() + 1E-6,
32 blhCoord.getLongitude());
33             tagBLHCoord temBlhCoord = new tagBLHCoord();
34             temBlhCoord.setLatitude(blhCoord.getLatitude() - 1E-6);
35             temBlhCoord.setLongitude(blhCoord.getLongitude() - 1E-6);
36             temBlhCoord.setAltitude(blhCoord.getAltitude());
37             tagNEhCoord tagNEhCoord1 = new tagNEhCoord();
38             coordinateConvert.BLHtoNEh(temBlhCoord, tagNEhCoord1);
39             temBlhCoord.setLatitude(blhCoord.getLatitude() + 1E-6);
40             temBlhCoord.setLongitude(blhCoord.getLongitude() + 1E-6);
41             tagNEhCoord tagNEhCoord2 = new tagNEhCoord();
42             coordinateConvert.BLHtoNEh(temBlhCoord, tagNEhCoord2);
43             double K = CommonFunction.GetDistance(tagNEhCoord1, tagNEhCoord2) / dDistance;
44             linearLayoutCoordinate.add(getString(R.string.label_scale_correction_factor), StringFunction.
45 .valueOf(K, 10));
46         }
47     }
48     BaseChangeCorrectParameter correctParameter = temGnssData.getBaseCorrectParameter();
49     if (correctParameter != null)
50     {
```

```
1      tagNEhCoord nehCoord = correctParameter.getCorrectNehCoordParameter();
2      if (ConfigSystem.getInstance().isDisplayNorthFirst()) {
3          linearLayoutCoordinate.add(getString(R.string.label_adjustment_value_north),
4 StringFunction.valueOf(unitType.getLength(nehCoord.getNorth())));
5          linearLayoutCoordinate.add(getString(R.string.label_adjustment_value_east),
6 StringFunction.valueOf(unitType.getLength(nehCoord.getEast())));
7      }
8      else
9      {
10         linearLayoutCoordinate.add(getString(R.string.label_adjustment_value_east),
11 StringFunction.valueOf(unitType.getLength(nehCoord.getEast())));
12         linearLayoutCoordinate.add(getString(R.string.label_adjustment_value_north),
13 StringFunction.valueOf(unitType.getLength(nehCoord.getNorth())));
14     }
15     linearLayoutCoordinate.add(getString(R.string.label_adjustment_value_height),
16 StringFunction.valueOf(unitType.getLength(nehCoord.getHeight())));
17 }
18     CustomTextViewListLayout                                         linearLayoutPrecision=
19 findViewById(R.id.linearLayout_Precision);
20     linearLayoutPrecision.clear();
21     strTemString = StringFunction.valueOf(temGnssData.getVelocity() * 3.6);
22     linearLayoutPrecision.add(getString(R.string.label_point_detail_speed),
23 StringFunction.valueOf(Math.ceil(temGnssData.getAgeOfDiff()),                                                 true),
24 getString(R.string.label_point_detail_heading), strTemString);
25     strTemString = "NA";
26     if(temGnssData.getPdop() > 1E-4) {
27         strTemString = StringFunction.valueOf(temGnssData.getPdop());
28     }
29     String strTemString2 = "NA";
30     if(temGnssData.getHrms() > 1E-4) {
31         strTemString2 = StringFunction.valueOf(unitType.getLength(temGnssData.getHrms()));
32     }
33     linearLayoutPrecision.add(getString(R.string.label_point_detail_pdop),    strTemString,
34 getString(R.string.label_point_detail_hrms), strTemString2);
35     strTemString = "NA";
36     if(temGnssData.getHdop() > 1E-4) {
37         strTemString = StringFunction.valueOf(temGnssData.getHdop());
38     }
39     strTemString2 = "NA";
40     if(temGnssData.getVrms() > 1E-4) {
41         strTemString2 = StringFunction.valueOf(unitType.getLength(temGnssData.getVrms()));
42     }
43     linearLayoutPrecision.add(getString(R.string.label_point_detail_hdop),    strTemString,
44 getString(R.string.label_point_detail_vrms), strTemString2);
45     strTemString = "NA";
46     if(temGnssData.getVrms() > 1E-4) {
47         strTemString = StringFunction.valueOf(temGnssData.getVdop());
48     }
49     linearLayoutPrecision.add(getString(R.string.label_point_detail_vdop),    strTemString,
50 getString(R.string.label_point_detail_diff_delay), StringFunction.valueOf(Math.ceil(temGnssD
```

```
1  ata.getAgeOfDiff()), true));
2      linearLayoutPrecision.add(getString(R.string.string_record_average_count),
3  String.valueOf(temGnssData.getEpochCount()),
4  getString(R.string.string_record_average_count), String.valueOf(temGnssData.getElevMask()));
5      CustomTextViewListLayout linearLayoutOther= findViewById(R.id.linearLayout_Other);
6      linearLayoutOther.clear();
7      tagGnssRefStationItem refStationItem = temGnssData.getRefStationData();
8      if (refStationItem != null) {
9          linearLayoutOther.add(getString(R.string.label_point_detail_base_id),
10 refStationItem.getBaseId(),
11 getString(R.string.label_point_detail_ref_distance), StringFunction.valueOf(unitType.getLength(temGnssData.getDistanceToBase())));
12      }
13      linearLayoutOther.add(getString(R.string.label_point_detail_utcTime),
14 temGnssData.getDateTime().toString());
15      linearLayoutOther.add(getString(R.string.label_point_detail_localTime),
16 temGnssData.getLocalDateTime().toString());
17      linearLayoutOther.add(getString(R.string.string_instrument_serial_no),
18 temGnssData.getDeviceSN());
19  }
20  }
21 }
22 public class SurveySettingActivity extends CommonBaseFragmentActivity implements
23 OnClickListener {
24     private SettingFragmentAdapter mFragmentAdapter;
25     @Override
26     protected void onCreate(Bundle savedInstanceState) {
27         super.onCreate(savedInstanceState);
28         setContentView(R.layout.activity_survey_setting);
29         initialUI();
30     }
31     private void initialUI() {
32         initClickListener(R.id.button_OK, this);
33         initClickListener(R.id.button_Default, this);
34         initClickListener(R.id.button_Backspace, this);
35         initClickListener(R.id.button_Clear, this);
36         eSurveyWorkMode surveyWorkMode =
37 eSurveyWorkMode.swigToEnum(getIntent().getIntExtra("SurveyWorkMode",
38 WordModeManage.getInstance().getWorkMode().swigValue()));
39         ePointRecordMode recordMode = ePointRecordMode.POINT_RECORD_MODE_SMOOTH;
40         if (surveyWorkMode == eSurveyWorkMode.WORK_MODE_SURVEY_CONTROL_POINT)
41         {
42             recordMode = ePointRecordMode.POINT_RECORD_MODE_CONTROL;
43         }
44         else if (surveyWorkMode == eSurveyWorkMode.WORK_MODE_SURVEY_AUTO_POINT)
45         {
46             recordMode = ePointRecordMode.POINT_RECORD_MODE_CONTINUUM;
47         }
48         else {
49             if (RecordPointBase.getInstance().getPointRecordMode() ==
50 ePointRecordMode.POINT_RECORD_MODE_BASE_SURVEY)
```

```
1     recordMode = ePointRecordMode.POINT_RECORD_MODE_BASE_SURVEY;
2     else if (ConfigPointSurvey.getInstance().isEnablePPK())
3         recordMode = ePointRecordMode.POINT_RECORD_MODE_STOP_GO;
4     }
5     mFragmentAdapter = new SettingFragmentAdapter(getSupportFragmentManager(), this);
6     Bundle args=new Bundle();
7     args.putInt("mode", recordMode.swigValue());
8     if (surveyWorkMode == eSurveyWorkMode.WORK_MODE_CAD_EDIT)
9     {
10         mFragmentAdapter.addFragment(new SettingCadEditFragment());
11        mFragmentAdapter.addFragment(new SettingMenuDisplayFragment());
12    }
13    else {
14        SettingRecordItemConfigFragment fragment = new SettingRecordItemConfigFragment();
15        fragment.setArguments(args);
16        mFragmentAdapter.addFragment(fragment);
17        switch (surveyWorkMode) {
18            case WORK_MODE_STAKEOUT_POINT:
19                mFragmentAdapter.addFragment(new SettingPointStakeoutFragment());
20                break;
21            case WORK_MODE_STAKEOUT_OBJECT:
22                mFragmentAdapter.addFragment(new SettingObjectStakeoutFragment());
23                break;
24        }
25        if (surveyWorkMode != eSurveyWorkMode.WORK_MODE_SURVEY_TEXT &&
26            surveyWorkMode != eSurveyWorkMode.WORK_MODE_SURVEY_CONTROL_POINT &&
27            surveyWorkMode != eSurveyWorkMode.WORK_MODE_SURVEY_AUTO_POINT) {
28            mFragmentAdapter.addFragment(new SettingInfoDisplayFragment());
29            mFragmentAdapter.addFragment(new SettingMenuDisplayFragment());
30        }
31    }
32    ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
33    viewPager.setAdapter(mFragmentAdapter);
34    viewPager.addOnPageChangeListener(new ViewPager.OnPageChangeListener() {
35        @Override
36        public void onPageScrolled(int i, float v, int i1) {
37        }
38        @Override
39        public void onPageSelected(int i) {
40            ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
41            if (mFragmentAdapter.getItem(viewPager.getCurrentItem()).isSupportClear())
42            {
43                setVisibility(R.id.button_Clear, View.VISIBLE);
44            }
45            else {
46                setVisibility(R.id.button_Clear, View.GONE);
47            }
48            if (mFragmentAdapter.getItem(viewPager.getCurrentItem()).isSupportBackspace())
49            {
50                setVisibility(R.id.button_Backspace, View.VISIBLE);
51            }
52        }
53    });
54 }
```

```
1      }
2      else {
3          setVisibility(R.id.button_Backspace, View.GONE);
4      }
5  }
6  @Override
7  public void onPageScrollStateChanged(int i) {
8  }
9 });
10 TabLayout tabLayout = findViewById(R.id.tabLayout_Fragment);
11 tabLayout.setupWithViewPager(viewPager);
12 if(mFragmentAdapter.getCount() <= 1)
13     tabLayout.setVisibility(View.GONE);
14 }
15 @Override
16 public void onClick(View arg0) {
17     switch (arg0.getId()) {
18         case R.id.button_Default:
19             OnUseDefaultConfig();
20             break;
21         case R.id.button_Clear:
22             OnClearConfig();
23             break;
24         case R.id.button_Backspace: {
25             ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
26             mFragmentAdapter.getItem(viewPager.getCurrentItem()).onButtonBackspace();
27         }
28             break;
29         case R.id.button_OK: {
30             for (int i=0; i<mFragmentAdapter.getCount(); i++) {
31                 mFragmentAdapter.getItem(i).updateValueFromUI();
32             }
33             setResult(AppFinalUtil.RETURN_CODE_DEFAULT);
34             finish();
35         }
36         break;
37         default:
38             break;
39     }
40 }
41 private void OnUseDefaultConfig() {
42     new
43     CustomDialog(this, R.string.string_prompt, R.string.string_prompt_message_used_default_setting,
44     R.string.button_ok, R.string.button_cancel)
45     .setDialogListener(new CustomDialog.OnDialogListener() {
46         @Override
47         public void onPositiveClick(View customView, DialogInterface dialogInterface,
48         int which) {
49             ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
50             mFragmentAdapter.getItem(viewPager.getCurrentItem()).onButtonDefault();
51         }
52     });
53 }
```

```
1         }
2         @Override
3         public void onNegativeClick(View customView, DialogInterface dialogInterface,
4             int which) {
5             }
6             }).showDialog();
7         }
8     private void OnClearConfig() {
9         new
10    CustomDialog(this, R.string.string_prompt, R.string.string_prompt_message_delete_setting
11        , R.string.button_ok, R.string.button_cancel)
12        .setDialogListener(new CustomDialog.OnDialogListener() {
13            @Override
14            public void onPositiveClick(View customView, DialogInterface dialogInterface,
15                int which) {
16                ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
17                mFragmentAdapter.getItem(viewPager.getCurrentItem()).onButtonClear();
18            }
19            @Override
20            public void onNegativeClick(View customView, DialogInterface dialogInterface,
21                int which) {
22                }
23            }).showDialog();
24        }
25        @Override
26        public void onActivityResult(int requestCode, int resultCode, Intent data) {
27            ViewPager viewPager = findViewById(R.id.viewPager_Fragment);
28            mFragmentAdapter.getItem(viewPager.getCurrentItem()).onActivityResult(requestCode&0xFFFF,
29            resultCode, data);
30        }
31    }
32    public class SettingInfoDisplayFragment extends SettingFragment {
33        ArrayList<Integer> mSelectArrayList = new ArrayList<Integer>();
34        private DisplayConfig mDisplayConfig = null;
35        @Nullable
36        @Override
37        public View onCreateView(LayoutInflater inflater, @Nullable ViewGroup container, Bundle
38        savedInstanceState) {
39            if (mInfoView != null)
40                return mInfoView;
41            mInfoView
42            inflater.inflate(R.layout.layout_fragment_display_info_select, container, false);
43            eSurveyWorkMode wordMode = WordModeManage.getInstance().getWorkMode();
44            mDisplayConfig = ConfigDisplayInfoManage.getInstance().getDisplayConfig(wordMode);
45            mSelectArrayList = mDisplayConfig.getSelectDisplayList();
46            CustomItemListLayout           itemListLayout
47            mInfoView.findViewById(R.id.LinearLayout_ItemList);
48            itemListLayout.setColumnCount(AppFinalUtil.isLanguageZh() ? 3 : 2);
49            itemListLayout.setOnClickListener(new CustomListItemRow.OnRowClickListener() {
50                @Override
```

```
1     public void onClick(String strValue, int id) {
2         if(mSelectArrayList.size() >= 8) {
3             return;
4         }
5         eDisplayItemType fieldType = eDisplayItemType.swigToEnum(id);
6         mSelectArrayList.add(fieldType.swigValue());
7         updateValueToUI();
8     }
9     @Override
10    public void onClickDelete(String strValue, int id) {
11    }
12 });
13     updateValueToUI();
14     setCheckButtonChecked(R.id.checkButton_DisplayName,
15 ConfigSystem.getInstance().isDisplayMapName());
16     setCheckButtonChecked(R.id.checkButton_DisplayCode, ConfigSystem.getInstance().isDisplayMapC
ode());
17     setCheckButtonChecked(R.id.checkButton_DisplayHeight, ConfigSystem.getInstance().isDisplayMa
pHeight());
18     CustomTextViewLayoutSelect temLayoutSelect = =
19     mInfoView.findViewById(R.id.LinearLayout_BackgroundColor);
20     temLayoutSelect.clearItem();
21     temLayoutSelect.addItem(getString(R.string.string_color_white));
22     temLayoutSelect.addItem(getString(R.string.string_color_black));
23     temLayoutSelect.setSelectedId(ConfigSystem.getInstance().getBackgroundColor() ==
24 Color.BLACK ? 1:0);
25     return mInfoView;
26 }
27     @Override
28     public void onButtonDefault()
29     {
30         mSelectArrayList = mDisplayConfig.getDefaultDisPlayItems();
31         updateValueToUI();
32     }
33     public boolean isSupportBackspace()
34     {
35         return true;
36     }
37     @Override
38     public void onButtonBackspace()
39     {
40         if (mSelectArrayList.size() > 0)
41             mSelectArrayList.remove(mSelectArrayList.size()-1);
42         updateValueToUI();
43     }
44     @Override
45     public String getTitle() {
46         return AppFinalUtil.getString(R.string.string_display_info);
47     }
48     @Override
```

```
1  public void updateValueToUI() {
2      if (mInfoView == null)
3          return;
4      CustomInfoView infoView = mInfoView.findViewById(R.id.custom_display_info_view);
5      infoView.requestLayout(mSelectArrayList);
6      infoView.invalidate();
7      CustomItemListLayout itemLayout = itemListLayout
8      mInfoView.findViewById(R.id.linearLayout_ItemList);
9      itemListLayout.clear();
10     ArrayList<Integer> enableSelectList = =
11     mDisplayConfig.getDisplayItemsNoInList(mSelectArrayList);
12     for(int i=0;i<enableSelectList.size();i++) {
13         eDisplayItemType fieldType = eDisplayItemType.swigToEnum(enableSelectList.get(i));
14         itemListLayout.add(fieldType.getTitle(), fieldType.swigValue());
15     }
16     itemListLayout.updateValue();
17 }
18 @Override
19 public void updateValueFromUI() {
20     if (mInfoView == null)
21         return;
22     if (mDisplayConfig != null) {
23         mDisplayConfig.setSelectDisplayList(mSelectArrayList);
24         ConfigDisplayInfoManage.getInstance().saveConfig();
25     }
26     ConfigSystem.getInstance().setDisplayMapName(getCheckButtonChecked(R.id.checkButton_Display
27     Name));
28     ConfigSystem.getInstance().setDisplayMapCode(getCheckButtonChecked(R.id.checkButton_Display
29     Code));
30     ConfigSystem.getInstance().setDisplayMapHeight(getCheckButtonChecked(R.id.checkButton_Displ
31     ayHeight));
32     CustomTextViewLayoutSelect temLayoutSelect = =
33     mInfoView.findViewById(R.id.linearLayout_BackgroundColor);
34     ConfigSystem.getInstance().setBackgroundColor(temLayoutSelect.getSelectedId() ==
35     1?Color.BLACK:Color.WHITE);
36     ConfigSystem.getInstance().saveConfig();
37 }
38 }
39 public class SettingPointStakeoutFragment extends SettingFragment {
40     @Nullable
41     @Override
42     public View onCreateView(LayoutInflater inflater, @Nullable ViewGroup container, Bundle
43     savedInstanceState) {
44         if (mInfoView != null)
45             return mInfoView;
46         mInfoView = inflater.inflate(R.layout.layout_setting_stakeout_point, container, false);
47         eLengthUnitType unitType = ConfigSystem.getInstance().getLengthUnitType();
48         setCheckButtonChecked(R.id.checkButton_Stakeout_Direction,
49         ConfigStakeout.getInstance().isPromptStakeoutDirection());
50         CustomTextViewLayoutSelect layoutSelect = =
```

```
1 mInfoView.findViewById(R. id. layoutSelect_Direction_Reference);  
2     layoutSelect.clearItem();  
3     ArrayList<eDirectionReference> directionReferences =  
4     DeviceCommand.getInstance().getAvailableDirectionReferenceTypes();  
5     for (int i=0; i< directionReferences.size(); i++) {  
6         eDirectionReference directionReference = directionReferences.get(i);  
7         layoutSelect.addItem(directionReference.getTitle(), directionReference.swigValue());  
8     }  
9     layoutSelect.registerItemSelectedInterface(new  
10    CustomTextViewLayoutSelect.OnItemSelectedCallback() {  
11        @Override  
12            public void onItemSelected(View view, String label, int id) {  
13                int visibility = eDirectionReference.swigToEnum(id) ==  
14                eDirectionReference.TYPE_REFERENCE_POINT?View.VISIBLE:View.GONE;  
15               setVisibility(R. id. viewListLayout_ReferencePoint, visibility);  
16               setVisibility(R. id. view_line_ReferencePoint, visibility);  
17            }  
18        });  
19    layoutSelect.setSelectedId(ConfigStakeout.getInstance().getStakeoutReference().swigValue());  
20    EntityPoint referencePoint = ConfigStakeout.getInstance().getReferencePoint();  
21    CustomTextViewListLayout viewListLayoutReferencePoint =  
22    mInfoView.findViewById(R. id. viewListLayout_ReferencePoint);  
23    viewListLayoutReferencePoint.setName(referencePoint.strName);  
24    viewListLayoutReferencePoint.clear();  
25    if (ConfigSystem.getInstance().isDisplayNorthFirst())  
26        viewListLayoutReferencePoint.add(StringFunction.format("%s:%s",  
27        AppFinalUtil.getString(R. string. string_display_bar_north),  
28        StringFunction.valueOf(unitType.getLength(referencePoint.dNorth))), "",  
29        StringFunction.format("%s:%s", AppFinalUtil.getString(R. string. string_display_bar_east),  
30        StringFunction.valueOf(unitType.getLength(referencePoint.dEast))), "");  
31    else  
32        viewListLayoutReferencePoint.add(StringFunction.format("%s:%s",  
33        AppFinalUtil.getString(R. string. string_display_bar_east),  
34        StringFunction.valueOf(unitType.getLength(referencePoint.dEast))), "",  
35        StringFunction.format("%s:%s", AppFinalUtil.getString(R. string. string_display_bar_north),  
36        StringFunction.valueOf(unitType.getLength(referencePoint.dNorth))), "");  
37    viewListLayoutReferencePoint.setOnClickListener(new View.OnClickListener() {  
38        @Override  
39        public void onClick(View v) {  
40            EntityPoint referencePoint = ConfigStakeout.getInstance().getReferencePoint();  
41            Intent intent = new Intent();  
42            intent.putExtra("VaildCoordType", 0x01);  
43            intent.putExtra("CoordinateType", eCoordinateType.TYPE_COORD_NEH.swigValue());  
44            intent.putExtra("InputName", true);  
45            intent.putExtra("Name", referencePoint.strName);  
46            intent.putExtra("North", referencePoint.dNorth);  
47            intent.putExtra("East", referencePoint.dEast);  
48            intent.putExtra("Height", referencePoint.dHeight);  
49            intent.setClass(getApplicationContext(), CoordinateInputActivity.class);  
50            startActivityForResult(intent, R. id. viewListLayout_ReferencePoint&0xFFFF);  
51        }  
52    });  
53}
```

```
1         }
2     });
3     CustomTextViewLayoutSelectEdit           layoutSelectEdit      =
4     mInfoView.findViewById(R. id. linearLayout_PromptRange);
5     String          strTitle            =           StringFunction. format("%s(%s)",
6     getString(R. string. string_stakeout_prompt_range), unitType. getUnit());
7     layoutSelectEdit.setTitle(strTitle);
8     layoutSelectEdit.addItems(new String[] {"0. 5", "1", "1. 5", "2", "3", "5", "10"});
9     setUnitDoubleValue(R. id. linearLayout_PromptRange,
10    ConfigStakeout. getInstance(). getPromptRange());
11    layoutSelectEdit = mInfoView.findViewById(R. id. linearLayout_RecordRange);
12    strTitle           =           StringFunction. format("%s(%s)",
13    getString(R. string. string_stakeout_record_range), unitType. getUnit());
14    layoutSelectEdit.setTitle(strTitle);
15    layoutSelectEdit.addItems(new String[] {"0. 02", "0. 05", "0. 1", "0. 2", "0. 5", "1", "10"});
16    setUnitDoubleValue(R. id. linearLayout_RecordRange,
17    ConfigStakeout. getInstance(). getStakeoutRecordRange());
18    CustomCheckButton           checkButton      =
19    mInfoView.findViewById(R. id. checkButton_AutoStakeCompass);
20    checkButton.setChecked(ConfigStakeout. getInstance(). isAutoEnterStakeCompass());
21    checkButton = mInfoView.findViewById(R. id. checkButton_AutoZoom);
22    checkButton.setChecked(ConfigStakeout. getInstance(). isAutoZoom());
23    checkButton = mInfoView.findViewById(R. id. checkButton_AutoStakeout);
24    checkButton.setChecked(ConfigStakeoutPoint. getInstance(). isAutoStakeout());
25    checkButton = mInfoView.findViewById(R. id. checkButton_AutoMarkStakeout);
26    checkButton.setChecked(ConfigStakeoutPoint. getInstance(). isAutoMarkStakeout());
27    checkButton.setVisibility(View. GONE);
28    return mInfoView;
29 }
30 @Override
31 public void onActivityResult(int requestCode, int resultCode, Intent data) {
32     super.onActivityResult(requestCode, resultCode, data);
33     if(resultCode == AppFinalUtil. RETURN_CODE_VALUE_BACK) {
34         if ((requestCode&0xFFFF) == (R. id. viewListLayout_ReferencePoint&0xFFFF)) {
35             EntityPoint referencePoint = ConfigStakeout. getInstance(). getReferencePoint();
36             referencePoint.strName = data.getStringExtra("Name");
37             referencePoint.dNorth = data.getDoubleExtra("North", 0);
38             referencePoint.dEast = data.getDoubleExtra("East", 0);
39             referencePoint.dHeight = data.getDoubleExtra("Height", 0);
40             CustomTextViewListLayout           viewListLayoutReferencePoint      =
41     mInfoView.findViewById(R. id. viewListLayout_ReferencePoint);
42             viewListLayoutReferencePoint.setName(referencePoint.strName);
43             viewListLayoutReferencePoint.clear();
44             eLengthUnitType unitType = ConfigSystem. getInstance(). getLengthUnitType();
45             if (ConfigSystem. getInstance(). isDisplayNorthFirst())
46                 viewListLayoutReferencePoint.add(StringFunction. format("%s:%s",
47     AppFinalUtil. getString(R. string. string_display_bar_north),
48     StringFunction. valueOf(unitType.getLength(referencePoint.dNorth))), "", ,
49     StringFunction. format("%s:%s",     AppFinalUtil. getString(R. string. string_display_bar_east),
50     StringFunction. valueOf(unitType.getLength(referencePoint.dEast))), "");
```

```
1         else
2             viewListLayoutReferencePoint.add(StringFunction.format("%s:%s",
3                 AppFinalUtil.getString(R.string.string_display_bar_east),
4                 StringFunction.valueOf(unitType.getLength(referencePoint.dEast))), "",
5                 StringFunction.format("%s:%s", AppFinalUtil.getString(R.string.string_display_bar_north),
6                 StringFunction.valueOf(unitType.getLength(referencePoint.dNorth))), ""));
7         }
8     }
9 }
10 @Override
11 public void onButtonDefault() {
12     CustomCheckButton checkButton = =
13     mInfoView.findViewById(R.id.checkButton_AutoStakeCompass);
14     checkButton.setChecked(false);
15     checkButton = mInfoView.findViewById(R.id.checkButton_AutoZoom);
16     checkButton.setChecked(false);
17     checkButton = mInfoView.findViewById(R.id.checkButton_AutoStakeout);
18     checkButton.setChecked(false);
19     checkButton = mInfoView.findViewById(R.id.checkButton_AutoMarkStakeout);
20     checkButton.setChecked(false);
21     eLengthUnitType unitType = ConfigSystem.getInstance().getLengthUnitType();
22     checkButton = mInfoView.findViewById(R.id.checkButton_Stakeout_Direction);
23     checkButton.setChecked(DeviceCommand.getInstance().isTotalStation());
24     CustomTextViewLayoutSelect layoutSelect = =
25     mInfoView.findViewById(R.id.layoutSelect_Direction_Reference);
26     layoutSelect.setSelectedId(-1);
27     CustomTextViewLayoutSelectEdit layoutSelectEdit = =
28     mInfoView.findViewById(R.id.linearLayout_PromptRange);
29     layoutSelectEdit.setText(StringFunction.valueOf(unitType.getLength(1), true));
30     layoutSelectEdit = mInfoView.findViewById(R.id.linearLayout_RecordRange);
31     layoutSelectEdit.setText(StringFunction.valueOf(unitType.getLength(0.02), true));
32 }
33 @Override
34 public String getTitle() {
35     return AppFinalUtil.getString(R.string.title_stakeout_setting);
36 }
37 @Override
38 public void updateValueToUI() {
39 }
40 @Override
41 public void updateValueFromUI() {
42     if (mInfoView == null)
43         return;
44     CustomCheckButton checkButton = =
45     mInfoView.findViewById(R.id.checkButton_AutoStakeCompass);
46     ConfigStakeout.getInstance().setAutoEnterStakeCompass(checkButton.isChecked());
47     checkButton = mInfoView.findViewById(R.id.checkButton_AutoZoom);
48     ConfigStakeout.getInstance().setAutoZoom(checkButton.isChecked());
49     checkButton = mInfoView.findViewById(R.id.checkButton_AutoStakeout);
50     ConfigStakeoutPoint.getInstance().setAutoStakeout(checkButton.isChecked());
```

```
1     checkButton = mInfoView.findViewById(R. id. checkButton_AutoMarkStakeout);
2     ConfigStakeoutPoint. getInstance(). setAutoMarkStakeout (checkButton. isChecked());
3     eLengthUnitType unitType = ConfigSystem. getInstance(). getLengthUnitType();
4     CustomTextviewLayoutSelectEdit           layoutSelectEdit      =
5     mInfoView. findViewById(R. id. linearLayout_PromptRange);
6     ConfigStakeout. getInstance(). setPromptRange (unitType. getMeterLength(layoutSelectEdit. getDo
7     bleValue()));
8     layoutSelectEdit = mInfoView. findViewById(R. id. linearLayout_RecordRange);
9     ConfigStakeout. getInstance(). setStakeoutRecordRange (unitType. getMeterLength(layoutSelectEdi
10    t. getDoubleValue()));
11    checkButton = mInfoView. findViewById(R. id. checkButton_Stakeout_Direction);
12    ConfigStakeout. getInstance(). setPromptStakeoutDirection (checkButton. isChecked());
13    CustomTextviewLayoutSelect           layoutSelect      =
14    mInfoView. findViewById(R. id. layoutSelect_Direction_Reference);
15    ConfigStakeout. getInstance(). setStakeoutReference (eDirectionReference. swigToEnum(layoutSele
16    ct. getSelectedId()));
17    ConfigStakeoutPoint. getInstance(). saveConfig();
18    ConfigStakeout. getInstance(). saveConfig();
19  }
20 }
21 public class SettingMenuDisplayFragment extends SettingFragment {
22     private DisplayConfig mDisplayConfig = null;
23     private ArrayList<Integer> mSelectArrayList = new ArrayList<Integer>();
24     @Nullable
25     @Override
26     public View onCreateView(LayoutInflater inflater, @Nullable ViewGroup container, Bundle
27     savedInstanceState) {
28         if (mInfoView != null)
29             return mInfoView;
30         mInfoView
31         inflater.inflate(R. layout. layout_fragment_menu_info_select, container, false);
32         eSurveyWorkMode wordMode = WordModeManage. getInstance(). getWorkMode();
33         mDisplayConfig = ConfigDisplayInfoManage. getInstance(). getDisplayConfig (wordMode);
34         mSelectArrayList = mDisplayConfig. getSelectMenuList();
35         CustomItemListLayout           itemListLayout      =
36         mInfoView. findViewById(R. id. linearLayout_SelectList);
37         itemListLayout. setColumnCount(1);
38         itemListLayout. setOnClickListener (new CustomListItemRow. OnRowClickListener() {
39             @Override
40             public void onClick(String strValue, int id) {
41                 eFunctionType functionType = eFunctionType. swigToEnum(id);
42                 mSelectArrayList. add(functionType. swigValue());
43                 updateValueToUI();
44             }
45             @Override
46             public void onClickDelete(String strValue, int id) {
47             }
48         });
49         itemListLayout = mInfoView. findViewById(R. id. linearLayout_SelectedList);
50         itemListLayout. setColumnCount(1);
```

```
1     itemListLayout.setOnClickListener(new CustomListIItemRow.OnRowClickListener() {
2         @Override
3         public void onClick(String strValue, int id) {
4             eFunctionType functionType = eFunctionType.swigToEnum(id);
5             mSelectArrayList.remove(Integer.valueOf(functionType.swigValue()));
6             updateValueToUI();
7         }
8         @Override
9         public void onClickDelete(String strValue, int id) {
10     }
11 });
12     return mInfoView;
13 }
14 @Override
15 public void onButtonDefault()
16 {
17     mSelectArrayList = mDisplayConfig.getDefaultMenuItems();
18     updateValueToUI();
19 }
20 public boolean isSupportClear()
21 {
22     return true;
23 }
24 @Override
25 public void onButtonClear()
26 {
27     mSelectArrayList.clear();
28     updateValueToUI();
29 }
30 @Override
31 public String getTitle() {
32     return AppFinalUtil.getString(R.string.string_display_menu);
33 }
34 @Override
35 public void updateValueToUI() {
36     if (mInfoView == null)
37         return;
38     CustomItemListLayout           itemListLayout
39     mInfoView.findViewById(R.id.LinearLayout_SelectList);
40     itemListLayout.clear();
41     ArrayList<Integer>          listAvailable
42     mDisplayConfig.getMenuItemsNoInList(mSelectArrayList);
43     for(Integer id:listAvailable){
44         if (id == eFunctionType.FUNCTION_TYPE_ELECTRON_BUBBLE.swigValue() &&
45             DeviceCommandParse.getInstance().getSensorModel() != ESensorModel.TiltSurvey)
46             continue;
47         itemListLayout.add(eFunctionType.swigToEnum(id));
48     }
49     itemListLayout.updateValue();
50     itemListLayout = mInfoView.findViewById(R.id.LinearLayout_SelectedList);
```

```
1     itemListLayout.clear();
2     for(int i = mSelectArrayList.size()-1; i>=0; i--) {
3         itemListLayout.add(eFunctionType.swigToEnum(mSelectArrayList.get(i)));
4     }
5     itemListLayout.updateValue();
6 }
7 @Override
8 public void updateValueFormUI() {
9     if (mDisplayConfig != null) {
10         mDisplayConfig.setSelectMenuList(mSelectArrayList);
11         ConfigDisplayInfoManage.getInstance().saveConfig();
12     }
13 }
14 }
15 public class AboutProgramActivity extends CommonEvent BaseActivity implements OnClickListener
16 {
17     private RegisterTransOutSocketClient transOutSocketClient = new
18 RegisterTransOutSocketClient();
19     @Override
20     public void onCreate(Bundle savedInstanceState)
21     {
22         super.onCreate(savedInstanceState);
23         setContentView(R.layout.activity_program_about);
24         if (AppFinalUtil.getAppID() == eAppIdentifierType.APP_ID_SURVEY_GINTEC)
25             setVisibility(R.id.imageView_Icon, View.VISIBLE);
26             setVisibility(R.id.button_Copy, View.GONE);
27             initialUI();
28             return;
29     }
30     private void initialUI()
31     {
32         String strVersion = StringFunction.format("V%s", AppFinalUtil.getAppVersion());
33         initClickListener(R.id.button_New_Version, this);
34         initClickListener(R.id.button_Activation, this);
35         initClickListener(R.id.button_Activation_Trans_out, this);
36         initClickListener(R.id.button_Feedback, this);
37         initClickListener(R.id.button_Apply, this);
38         initClickListener(R.id.textViewDeviceId, this);
39         String strCompany = AppFinalUtil.getAppID().getCompanyName();
40         ImageView temTextView = findViewById(R.id.imageView_logo);
41         try {
42             String strImageFileName = "";
43             strImageFileName = StringFunction.format("%s/%s",
44 ProjectManage.GetInstance().getProgramCachePath(), ".app_qr_code.png");
45             FileInputStream fis = new FileInputStream(strImageFileName);
46             temTextView.setImageBitmap(BitmapFactory.decodeStream(fis));
47         } catch (Exception e) {
48             temTextView.setImageResource(AppFinalUtil.getAppID().getQRCodeId());
49         }
50         setTextViewText(R.id.textView_Version, strVersion);
```

```
1     setTextviewText(R. id. textView_Company, strCompany);
2     setTextviewText(R. id. textView_Copyright, AppFinalUtil. getAppID().getCopyright());
3     if(VersionDownloadClient. isUpdateAvailable()) {
4         Button eventAd = findViewById(R. id. button_New_Version);
5         setTextviewText(R. id. button_New_Version, getString(R. string. label_new_version));
6         eventAd. setText(StringFunction. addRedPoint(eventAd. getText().toString()));
7     }
8     updateActivationInfo();
9 }
10 @Override
11 public void finish()
12 {
13     transOutSocketClient. disConnect();
14     super. finish();
15 }
16 private void updateActivationInfo() {
17     int overDateFunc
18     RegisterManage. GetInstance().isRegOverDate(eMainMenuType. MENU_TYPE_NULL);
19     boolean displayPVersion = false;
20     if (AppFinalUtil. getAppID().isChinaVersion() &&
21         (RegisterManage. GetInstance().getValidFunction()&0x02) <= 0)
22     {
23         if (AppFinalUtil. isLanguageZhCh())
24         {
25             if (CustomGnssData. getInstance().isValidate() &&
26                 CustomGnssData. getInstance().getSolutionType()
27                 eGnssSolutionType. FIX_TYPE_INVALID)
28             {
29                 boolean bPointInChina
30                 RegisterManage. GetInstance().pointInChina(CustomGnssData. getInstance().getLatitude(),
31                 CustomGnssData. getInstance().getLongitude());
32                 if (!bPointInChina)
33                 {
34                     displayPVersion = true;
35                 }
36             }
37         }
38         else {
39             displayPVersion = true;
40         }
41     }
42     if ((RegisterManage. GetInstance().getChinaLimitCode()&0x01) <=0 &&
43         (RegisterManage. GetInstance().getValidFunction()&0x01) <=0 &&
44         !displayPVersion)
45     {
46         setVisibility(R. id. labelDateTime, View. GONE);
47         setVisibility(R. id. textViewDateTime, View. GONE);
48         setVisibility(R. id. linearLayoutAuthorization, View. GONE);
49     }
50     else {
```

```
1      setVisibility(R. id. labelDateTime, View. VISIBLE) ;
2      setVisibility(R. id. textViewDateTime, View. VISIBLE) ;
3  }
4      setVisibility(R. id. linearLayout_PVersion, displayPVersion?View. VISIBLE:View. GONE) ;
5      setTextviewText(R. id. textViewDeviceId, RegisterManage. GetInstance(). getDeviceID()) ;
6      if (displayPVersion)
7  {
8          int expireDate = Math. min(RegisterManage. GetInstance(). getExpireDate1(),
9 RegisterManage. GetInstance(). getExpireDate2());
10         int nYear = expireDate/10000;
11         int nMonth = (expireDate%10000)/100;
12         int nDay = expireDate%100;
13         if(nYear<2000||nMonth==0||nDay==0)
14             setTextviewText(R. id. textViewPDateTime, getString(R. string. SYS_FS_NOT_ENABLED));
15         else {
16             String strDateTime = nYear + "—" + nMonth + "—" + nDay;
17             setTextviewText(R. id. textViewPDateTime, strDateTime);
18         }
19         if (expireDate - RegisterManage. GetInstance(). getRealTimeDate() < 100 &&
20             RegisterManage. GetInstance(). getExpireDate1() - expireDate > 0 &&
21             (overDateFunc&0x01) <= 0)
22             setVisibility(R. id. button_Apply, View. VISIBLE) ;
23         else
24             setVisibility(R. id. button_Apply, View. GONE) ;
25     }
26     int expireDate = RegisterManage. GetInstance(). getExpireDate1();
27     if (!displayPVersion && ((overDateFunc&0x02) > 0 || (RegisterManage. GetInstance(). getValidFunction()&0x02) > 0) &&
28 (RegisterManage. GetInstance(). getValidFunction()&0x02) > 0) &&
29         expireDate != RegisterManage. GetInstance(). getExpireDate2())
30     {
31         if (AppFinalUtil. isLanguageZhCh())
32     {
33             if (CustomGnssData. getInstance(). isValidate() &&
34                 CustomGnssData. getInstance(). getSolutionType() != eGnssSolutionType. FIX_TYPE_INVALID)
35                 bPointInChina = RegisterManage. GetInstance(). pointInChina(CustomGnssData. getInstance(). getLatitude(),
36 CustomGnssData. getInstance(). getLongitude());
37                 if (!bPointInChina)
38                     {
39                         expireDate = Math. min(expireDate,
40 RegisterManage. GetInstance(). getExpireDate2());
41                     }
42                     }
43                     }
44                     }
45                     }
46                     }
47                     else {
48                         expireDate = Math. min(expireDate, RegisterManage. GetInstance(). getExpireDate2());
49                     }
50     }
```

```
1     int nYear = expireDate/10000;
2     int nMonth = (expireDate%10000)/100;
3     int nDay = expireDate%100;
4     if(nYear<2000||nMonth==0||nDay==0) {
5         setTextViewText(R. id. textViewDateTime, getString(R. string. SYS_FS_NOT_ENABLED));
6         setVisibility(R. id. linearLayoutAuthorization, View. GONE);
7     }
8     else {
9         String strDateTime = nYear + "—" + nMonth + "—" + nDay;
10        String strRegisterKeyId = ConfigSystem. getInstance(). getSoftwareRegisterKeyId();
11        if (strRegisterKeyId. length()>8)
12        {
13            if (AppFinalUtil. getAppID() == eAppIdentifierType. APP_ID_SURVEY_GINTEC || 
14                AppFinalUtil. getAppID(). isSouthVersion()) {
15                setVisibility(R. id. linearLayoutAuthorization, View. VISIBLE);
16                String strAuthorization = StringFunction. format("%s***%s",
17 strRegisterKeyId. substring(0, 2), strRegisterKeyId. substring(strRegisterKeyId. length() - 6));
18                setTextViewText(R. id. textViewAuthorization, strAuthorization);
19            }
20            else {
21                setVisibility(R. id. linearLayoutAuthorization, View. GONE);
22                strDateTime += StringFunction. format("(%s***%s)", strRegisterKeyId. substring(0,
23 2), strRegisterKeyId. substring(strRegisterKeyId. length()-6));
24            }
25        }
26        else {
27            setVisibility(R. id. linearLayoutAuthorization, View. GONE);
28        }
29        setTextViewText(R. id. textViewDateTime, strDateTime);
30    }
31 }
32 @Override
33 public void onConfigurationChanged (Configuration newConfig) {
34     super. onConfigurationChanged(newConfig);
35     setContentView(R. layout. activity_program_about);
36     initialUI();
37 }
38 @Override
39 public void onClick(View arg0)
40 {
41     switch (arg0.getId()) {
42     case R. id. button_New_Version:
43         RegisterAutoManageClient. getInstance(). checkVersionUpdate();
44         showWaitingDialog(true);
45         break;
46     case R. id. button_Apply:
47     {
48         startActivityForResult(new Intent(this, ApplyForRegisterCodeActivity. class),
49 R. id. button_Apply);
49     }
50 }
```

```
1         break;
2     case R.id.button_Activation:
3         startActivityForResult(new Intent(this, SoftwareActivateActivity.class),
4             R.id.button_Activation);
5         break;
6     case R.id.button_Activation_Trans_out:
7         if (RegisterManage.GetInstance().getValidFunction() > 0)
8         {
9             new CustomDialog(this, getString(R.string.string_prompt),
10                 getString(R.string.string_trans_out_register),
11                 getString(R.string.button_ok), getString(R.string.button_cancel))
12                 .setDialogListener(new CustomDialog.OnDialogListener() {
13                     @Override
14                     public void onPositiveClick(View customView, DialogInterface
15                         dialogInterface, int which) {
16                         showWaitingDialog(true);
17                         transOutSocketClient.transOutActivation();
18                     }
19                     @Override
20                     public void onNegativeClick(View customView, DialogInterface
21                         dialogInterface, int which) {
22                         }
23                     }).showDialog();
24                 }
25             else {
26                 makeTextString(getString(R.string.string_no_trans_out_register_info));
27             }
28             break;
29     case R.id.button_Feedback:
30         startActivity(new Intent(this, UserFeedbackActivity.class));
31         break;
32     case R.id.textViewDeviceId:
33     {
34         try {
35             MultiFormatWriter writer = new MultiFormatWriter();
36             String info = RegisterManage.GetInstance().getDeviceID(); //输入的内容
37             String contents=new String(info.getBytes("UTF-8"), "ISO-8859-1");
38             BitMatrix matrix = writer.encode(contents, BarcodeFormat.CODE_128, 1000, 250);
39             BarcodeEncoder encoder = new BarcodeEncoder();
40             final Bitmap bitmap = encoder.createBitmap(matrix);
41             LinearLayout linearLayout = new LinearLayout(this);
42             linearLayout.setOrientation(LinearLayout.VERTICAL);
43             TextView textView = new TextView(this);
44             textView.setGravity(Gravity.CENTER_HORIZONTAL);
45             textView.setText(info);
46             textView.setTextSize(20);
47             ImageView image = new ImageView(this);
48             image.setAdjustViewBounds(true);
49             image.setImageBitmap(bitmap);
50             linearLayout.addView(image);
```

```
1    linearLayout.addView(textView);
2    new CustomDialog(this, linearLayout,
3                      getString(R.string.dialog_scan_code_128_title),
4                      null, getString(R.string.button_ok))
5                      .setDialogListener(new CustomDialog.OnDialogListener() {
6                          @Override
7                          public void onPositiveClick(View customView, DialogInterface
8 dialogInterface, int which) {
9                              }
10                         @Override
11                         public void onNegativeClick(View customView, DialogInterface
12 dialogInterface, int which) {
13                             }
14                         }).showDialog());
15                     } catch (WriterException e) {
16                         e.printStackTrace();
17                     } catch (Exception e) {
18                         }
19                     }
20                     break;
21                 }
22             }
23             @Override
24             protected void onActivityResult(int requestCode, int resultCode, Intent data) {
25                 super.onActivityResult(requestCode, resultCode, data);
26                 if (requestCode == R.id.button_Activation || requestCode == R.id.button_Apply)
27                 {
28                     updateActivationInfo();
29                 }
30             }
31             public void onEventMainThread(MainEvent.NetworkVersionConnectStatus result) {
32                 if (!result.isConnectSuccess())
33                 {
34                     makeTextString(getString(R.string.string_prompt_connect_server_overtime));
35                 }
36                 showWaitingDialog(false);
37             }
38             public void onEventMainThread(MainEvent.NetworkActivationUpdateStatus result) {
39                 updateActivationInfo();
40             }
41             public void onEventMainThread(MainEvent.NetworkTransOutActivationErrorStatus result) {
42                 if (result.getErrorCode() != eErrorCode.SUCCESS)
43                 {
44                     makeTextString(result.getErrorCode().getTitle());
45                 }
46                 showWaitingDialog(false);
47                 updateActivationInfo();
48             }
49 }
```