# WebService接口说明

1. **关于UKey的（在SecretKey.asmx页面中）**
2. 获取本机的特征码

|  |  |  |
| --- | --- | --- |
| 函数 | GetSerialNO(ref string sysCode) | |
| 调用dll | zhpappkey.dll | |
| 功能描述 | 获取本机的特征码 | |
| 参数 | [out] sysCode | 返回的系统特征码 |
| 返回值 | 0-成功，非0-失败 | |

1. 从Key中提取系统参数信息

|  |  |  |
| --- | --- | --- |
| 函数 | RetrieveSysInfo(string sessionID, ref UKeyOper.AppCustomerInfo customerInfo) | |
| 调用DLL | zhpappkey.dll | |
| 功能描述 | 从Key中提取系统参数信息 | |
| 参数 | [in] sessionID | CreateKeySession时返回的会话ID |
|  | [out] customerInfo | 系统信息结构函数执行正确,返回正确信息；函数执行错误,此结构忽略 |
| 返回值 | 0-成功，非0-失败 | |

1. 获取U Key用户名和密码

|  |  |  |  |
| --- | --- | --- | --- |
| 函数 | PhaseCodeStr(string sysCode, string grantCode, ref int keyOPCmd, ref string keyUser, StringBuilder oldKeyPwd, ref string newKeyPwd) | | |
| 调用dll | | zhpappkey.dll | |
| 功能描述 | 解析公司发回的授权码,返回从授权码中解析出来的Key用户名和密码 | | |
| 参数 | [in] sysCode | | 系统特征码 |
|  | [in] grantCode | | 系统的授权码 |
|  | [out] keyOPCmd | | 授权码的内部KEY操作模式，应用可忽略此值的处理，但要设置此变量 |
|  | [out] keyUser | | UKey的用户名 |
|  | [in] oldKeyPwd | | UKey的旧密码,调用程序可忽略此值 |
|  | [out] newKeyPwd | | UKey的新密码 |
| 返回值 | 0-成功，非0-失败 | | |

1. 打开key的session

|  |  |  |  |
| --- | --- | --- | --- |
| 函数 | | CreateKeySession(string sysCode, string keyUser, string keyUserPwd, ref string sessionID, StringBuilder reserved) | |
| 调用dll | zhpappkey.dll | | |
| 功能描述 | | 打开key的session | |
| 参数 | | [in] sysCode | 系统特征码,与前面向公司申请时的相同 |
|  | | [in] keyUser | UKey的用户名 |
|  | | [in] keyUserPwd | UKey的用户密码 |
|  | | [out] sessionID | 如果KEY存在且合法，返回一个会话ID，应用保存使用；否则此值为空字符串 |
|  | | [in] reserved | 保留使用，置成空值即可 |
| 返回值 | | 0-成功，非0-失败 | |

1. 看UKEY是否还正常存在

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | ValidKeyProp(string sessionID, ref string response) | | | |
| 调用dll | | zhpappkey.dll | |
| 功能描述 | 调用程序与UKEY在会话打开期间进行握手验证,看UKEY是否还正常存在 | | | |
| 参数 | [in]sessionID | | CreateKeySession时返回的会话ID | |
|  | [out] response | | UKEY的响应码,如果UKey在,返回16位的字符串,如果不在,返回空字符串 | |
| 返回值 | 0-成功，非0-失败 | | | |

1. 关闭与UKey的会话事务

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | CloseKeySession (string sessionID) | | | |
| 调用dll | | zhpappkey.dll | |
| 功能描述 | 关闭与UKey的会话事务 | | | |
| 参数 | [in]sessionID | | CreateKeySession时返回的会话ID | |
| 返回值 | 0-成功，非0-失败 | | | |

1. **TAC验证、MAC验证及PSAM卡操作（在SecretKey.asmx页面中）**
2. 验证TAC校验

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | CheckTAC(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, ulong ASN, UInt32 MakeCardID, int NoteCase, int OddFare, int OpCount, int OpFare, long poscode, string opdt, UInt32 TAC, int tacFalg) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 验证TAC校验 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in]ASN | | 卡唯一序列号 | |
|  | [in]MakeCardID | | 制卡商标识 | |
|  | [in]NoteCase | | 钱包类型 | |
|  | [in]OddFare | | 交易后余额(分) 4字节 | |
|  | [in]OpCount | | 交易前记录交易序号 2字节 | |
|  | [in]OpFare | | 交易额(分) 4字节 | |
|  | [in]poscode | | 中心库PSAM卡号 6字节 | |
|  | [in]opdt | | 交易时间 格式 yyyyMMddHHmmss 7字节 | |
|  | [in]TAC | | 需要校验的TAC码 4字节 8位16进制字符串 | |
|  | [in]tacFalg | | Tac码类型 0充值 1消费 | |
| 返回值 | -2 TAC码不通过,-1不通过,0通过,1更新认证码后重新调用 | | | |

1. 获取MAC码

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | CheckMAC(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, ulong ASN, UInt32 Rand, int NoteCase, int OddFare, int OpCount, int OpFare, ulong posCode, StringBuilder OpDT, ref UInt32 pMAC) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 获取MAC码 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in]ASN | | 卡唯一序列号 | |
|  | [in] Rand | |  | |
|  | [in]NoteCase | | 钱包类型 | |
|  | [in]OddFare | | 交易后余额(分) 4字节 | |
|  | [in]OpCount | | 交易前记录交易序号 2字节 | |
|  | [in]OpFare | | 交易额(分) 4字节 | |
|  | [in]poscode | | 中心库PSAM卡号 6字节 | |
|  | [in] OpDT | | 交易时间 格式 yyyyMMddHHmmss 7字节 | |
|  | [out] pMAC | | 返回获取到的MAC码 | |
| 返回值 |  | | | |

1. 获取发卡密钥

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | GetKeyForPublish(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, int totolSec, int purseSector, StringBuilder cardsnr, StringBuilder cardMac, ref string encKey) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 获取发卡密钥 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] totolSec | |  | |
|  | [in] purseSector | |  | |
|  | [in] cardsnr | |  | |
|  | [in] cardMac | |  | |
|  | [out] encKey | |  | |
| 返回值 | -1不通过,0通过,1更新认证码后重新调用 | | | |

1. 获取消费密钥

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | GetKeyForApp(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, StringBuilder sectorInfo, StringBuilder cardsnr, StringBuilder cardMac, ref string encKey) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 获取消费密钥 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] sectorInfo | |  | |
|  | [in] cardsnr | |  | |
|  | [in] cardMac | |  | |
|  | [out] encKey | |  | |
| 返回值 | -1不通过,0通过,1更新认证码后重新调用 | | | |

1. 获得充值密钥

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | GetTopUpKey(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, string sCardSnr, string cardMac, ref string key) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 获得充值密钥 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] sCardSnr | | 卡唯一号 | |
|  | [in] cardMac | | mac码 | |
|  | [out] key | | 充值密钥 | |
| 返回值 | -1不通过,0通过,1更新认证码后重新调用 | | | |

1. 获取充值密钥，制卡中心发卡前中间密钥

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | GetKeyForGJMidKey(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, StringBuilder citycode, ref string encKey) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 获取充值密钥，制卡中心发卡前中间密钥 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] citycode | |  | |
|  | [out] encKey | |  | |
| 返回值 | 100通过 | | | |

1. 注册PSAM卡

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | PsamCardRegister(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, string PsamCode, string PrintCode, string sCardSNR, ulong PosCode, string BeginDT, string EndDT) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 注册PSAM卡 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] PsamCode | |  | |
|  | [in] PrintCode | |  | |
|  | [in] sCardSNR | |  | |
|  | [in] PosCode | |  | |
|  | [in] BeginDT | |  | |
|  | [in] EndDT | |  | |
| 返回值 |  | | | |

1. 操作PSAM卡

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | PsamCardStatusMng(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, int OpType, ulong PosCode, string OpReason) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 操作PSAM卡 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] OpType | | 操作类型 1挂失 2解挂 3注销 | |
|  | [in] PosCode | |  | |
|  | [in] OpReason | |  | |
| 返回值 |  | | | |

1. 获取充值密钥，制卡中心发卡前中间密钥

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | NFC\_CommonInterFace(string VerifyServiceURL, int VerifyID, StringBuilder VerifyCode, string strDataIn, StringBuilder strDataOut) | | | |
| 调用dll | | WebServiceFunc.dll | |
| 功能描述 | 获取充值密钥，制卡中心发卡前中间密钥 | | | |
| 参数 | [in] VerifyServiceURL | |  | |
|  | [in]VerifyID | |  | |
|  | [in]VerifyCode | |  | |
|  | [in] strDataIn | |  | |
|  | [in] strDataOut | |  | |
| 返回值 | 100通过 | | | |

1. **关于授权文件的（在CityGrantFile.asmx页面中）**
2. 获得特征码

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | GetCharacterCode(ref string charCode) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 获得特征码 | | | |
| 参数 | [out] charCode | | 特征码 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 获取客户基本信息

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | GetBaseCustInfo(string characterCode, string fileName,ref GrantFileInterface.PST\_CustGrantInfo pCustInfo) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 获取客户基本信息,获得授权文件中包含的子系统授权信息 | | | |
| 参数 | [in] characterCode | | 特征码 | |
|  | [in] fileName | | 文件存储路径 | |
|  | [out] pCustInfo | | 客户授权信息的结构体指针 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 获取 2 级授权个数

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | Get2GrantInfoCount(string characterCode, string fileName,ref int grantCount) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 获取 2 级授权个数（应用包） | | | |
| 参数 | [in] characterCode | | 特征码 | |
|  | [in] fileName | | 文件存储路径 | |
|  | [out] grantCount | | 授权个数 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 获取 2 级授权信息

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | Get2GrantInfo(string characterCode, string fileName,ref GrantFileInterface.PST\_WebServiceGrantInfo pST\_GrantInfo, int count) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 获取 2 级授权信息（应用包） | | | |
| 参数 | [in] characterCode | | 特征码 | |
|  | [in] fileName | | 文件存储路径 | |
|  | [out] pST\_GrantInfo | | 二级系统授权信息的结构体指针 | |
|  | [in] count | | 参数三结构体内存块的大小 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 获取 3 级授权个数

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | Get3GrantInfoCount(StringBuilder characterCode, string fileName, string level2SysId, ref int count) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 获取 3 级授权个数（子系统） | | | |
| 参数 | [in] characterCode | | 特征码 | |
|  | [in] fileName | | 文件存储路径 | |
|  | [in] level2SysId | | 二级系统标识 | |
|  | [out] count | | 三级系统授权个数 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 获取 3 级系统授权信息

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | Get3GrantInfo(StringBuilder characterCode, string fileName, string level2SysId, ref GrantFileInterface.PST\_SubSystemGrantInfo pST\_GrantInfo, int count) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 获取 3 级系统授权信息 | | | |
| 参数 | [in] characterCode | | 特征码 | |
|  | [in] fileName | | 文件存储路径 | |
|  | [in] level2SysId | | 二级系统标识 | |
|  | [out] pST\_GrantInfo | | 三级系统授权信息的结构体指针 | |
|  | [in]count | | 参数三结构体内存块的大小 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 验证 2 级系统注册

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | Check2Reg(StringBuilder characterCode, string regCode) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 验证 2 级系统注册 | | | |
| 参数 | [in] characterCode | | 特征码 | |
|  | [in] regCode | | 注册码 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |

1. 验证 3 级系统注册

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 函数 | Check3Reg(string SysPwd, string SubSystemName, ref string invalidDt, string regCode) | | | |
| 调用dll | | SoftGrant.dll | |
| 功能描述 | 验证 3 级系统注册 | | | |
| 参数 | [in] SysPwd | | 32系统库密码 | |
|  | [in] SubSystemName | | 系统名称 | |
|  | [out]invalidDt | | 验证通过，返回注册码失效日期 | |
|  | [in]regCode | | 注册码 | |
| 返回值 | 0—成功；非0—失败；-1—系统异常 | | | |