

# Basic Command of SDChain-Core

## 1 Create an Account

### 1.1 Request

```
sdchaind -q wallet_propose
```

### 1.2 Answer

```
{
  "id" : 1,
  "result" : {
    "account_id" : "6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2",
    "key_type" : "secp256k1",
    "master_key" : "SHAG MUFF HOG RUN BUY MATE BURR FLED FOLK FIRM POT GELD",
    "master_seed" : "spyrAcnr[REDACTED]u2FME[REDACTED]uAL ",
    "master_seed_hex" : "144D7340104EF060719BC09C6E04D8D9",
    "public_key" : "aB4zQ7PUQQfpHat2cD5bhJNx4hxxpK8mvC4x6i5LeHvzb6uiuQyw",
    "public_key_hex" : "028805585F504A0BD34C6923F4899F7306A8520ACE5188EC1EAF8F0923C7617789",
    "status" : "success"
  }
}
```

Comments:

Account Address: 6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2

Account Private Key: spyrAcnr[REDACTED]u2FME[REDACTED]uAL

The account address is fixed with "6" as the initial letter, and the account private key is fixed with "s" as the initial letter.

### 1.3 Querying account information

```
sdchaind -q account_info 6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2
```

## 1.4 Result response

```
{
  "id" : 1,
  "result" : {
    "account" : "6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2",
    "error" : "actNotFound",
    "error_code" : 18,
    "error_message" : "Account not found.",
    "ledger_current_index" : 79823,
    "request" : {
      "account" : "6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2",
      "command" : "account_info"
    },
    "status" : "error",
    "validated" : false
  }
}
```

Comments: The newly created account is not activated, so it does not exist on the blockchain. Therefore, query the information reported on this account.

## 2 Activate account

### 2.1 Transactions Request

Activate an account. At present, this account requires a minimum of 5 SDAs. You only need to use the SDA account to send 5 SDAs to the account that needs to be activated.

```
sdchaind -q submit snoPB6XtM...qAfg1SUTb
'{"TransactionType":"Payment","Account":"6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh","Amount":"5000000","Destination":"6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2" }'
```

The minimum Unit of SDA is Drops,  
1 SDA = 1,000,000 Drops

### 2.2 Transaction response

```
{
  "id" : 1,
```

```

"result" : {
  "engine_result" : "tesSUCCESS",
  "engine_result_code" : 0,
  "engine_result_message" : "The transaction was applied. Only final in a validated ledger.",
  "status" : "success",
  "tx_blob" :
"1200002280000000240000000761400000000BEBBC2006840000000000000A73210330E7FC
9D56BB25D6893BA3F317AE5BCF33B3291BD63DB32654A313222F7FD02074463044022036C6
EBBC75DC23838D0B2E848B3E9F6DF32D49BF02176185190BD14338E3054002203B82804999
C3346D090362702A685E5CA4C3892EA48EC45C111D4CDFB31085CF8114B5F762798A53D543
A014CAF8B297CFF8F2F937E883146C13D558CA63C039B027F0336E66F7454D3B1ECB",
  "tx_json" : {
    "Account" : "6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh",
    "Amount" : "5000000",
    "Destination" : "6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2",
    "Fee" : "10",
    "Flags" : 2147483648,
    "Sequence" : 7,
    "SigningPubKey" :
"0330E7FC9D56BB25D6893BA3F317AE5BCF33B3291BD63DB32654A313222F7FD020",
    "TransactionType" : "Payment",
    "TxnSignature" :
"3044022036C6EBBC75DC23838D0B2E848B3E9F6DF32D49BF02176185190BD14338E305400
2203B82804999C3346D090362702A685E5CA4C3892EA48EC45C111D4CDFB31085CF",
    "hash" :
"0C4A44192EC3B2D72F8FFA9073DEC702C9BFDf2CB57615D976F6F5A534448742"
  }
}

```

## 2.3 Check your account again

```
sdchaind -q account_info 6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2
```

## 2.4 Query answer

```

{
  "id" : 1,
  "result" : {
    "account_data" : {

```

```

    "Account" : "6wiTjmQBnSwo1WekLYD46BfGLKKgiMryS2",
    "Balance" : "5000000",
    "Flags" : 0,
    "LedgerEntryType" : "AccountRoot",
    "OwnerCount" : 0,
    "PreviousTxnID" :
"0C4A44192EC3B2D72F8FFA9073DEC702C9BFDF2CB57615D976F6F5A534448742",
    "PreviousTxnLgrSeq" : 79939,
    "Sequence" : 1,
    "index" :
"B8500C7D56DCA3E838A8187C706DCB85AE07D94A177353BCC43DED10B76072EC"
  },
  "ledger_current_index" : 79984,
  "status" : "success",
  "validated" : false
}
}

```

## 3 Ordinary Trading

### 3.1 Transaction request

```

sdchaind -q submit ss3ZBtH.ryGE4Kuf
'{"TransactionType":"Payment","Account":"6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA","Amount":"100000","Destination":"64tWfk1p355SXFkQzidkNmZhNaiskcxpbZ"}'

```

Comments:

Submit is a command parameter;

ss3ZE.ryGE4Kuf is private key for source account

6nuy2shthb9dubspmjkzuxtf5fcndghyea is Source Account Address

64twfk1p355sxfkqzidknmzhnaiskcxpbz is Target Account Address

Payment is the type of transaction

100000 is transaction amount, Unit is Drops.

## 3.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "engine_result" : "tesSUCCESS",
    "engine_result_code" : 0,
    "engine_result_message" : "The transaction was applied. Only final in a validated ledger.",
    "status" : "success",
    "tx_blob" :
"120000228000000024000000376140000000000186A068400000000000000A732103EAC169
AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C87447304502210091
7A31B5AC1A38CA79BCFE35442D8615067CB1A64037500137B4F0F224FD08360220306D7292
DBBDE99B6DC7740B5D21E5C32E395E190F040641FAD1F21742A455A781142E244E6F20104E
57C0C60BD823CB312BF10928C78314F0182925994B6A50B795814CB6FE8FBF40AE2015",
    "tx_json" : {
      "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
      "Amount" : "100000",
      "Destination" : "64tWfk1p355SXFkQzidknmZhNaiskcxbZ",
      "Fee" : "10",
      "Flags" : 2147483648,
      "Sequence" : 55,
      "SigningPubKey" :
"03EAC169AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C8",
      "TransactionType" : "Payment",
      "TxnSignature" :
"3045022100917A31B5AC1A38CA79BCFE35442D8615067CB1A64037500137B4F0F224FD083
60220306D7292DBBDE99B6DC7740B5D21E5C32E395E190F040641FAD1F21742A455A7",
      "hash" :
"3BA64F565592AAA2631E85BAC76499F63A21C46200E827C7FAB7A0A5212375ED"
    }
  }
}
```

## 3.3 Results query

sdchaind	-q	tx
3BA64F565592AAA2631E85BAC76499F63A21C46200E827C7FAB7A0A5212375ED		

### 3.4 Result response

```
{
  "id" : 1,
  "result" : {
    "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
    "Amount" : "100000",
    "Destination" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
    "Fee" : "10",
    "Flags" : 2147483648,
    "Sequence" : 55,
    "SigningPubKey" :
"03EAC169AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C8",
    "TransactionType" : "Payment",
    "TxnSignature" :
"3045022100917A31B5AC1A38CA79BCFE35442D8615067CB1A64037500137B4F0F224FD083
60220306D7292DBBDE99B6DC7740B5D21E5C32E395E190F040641FAD1F21742A455A7",
    "date" : 565759612,
    "hash" :
"3BA64F565592AAA2631E85BAC76499F63A21C46200E827C7FAB7A0A5212375ED",
    "inLedger" : 242329,
    "ledger_index" : 242329,
    "meta" : {
      "AffectedNodes" : [
        {
          "ModifiedNode" : {
            "FinalFields" : {
              "Account" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
              "Balance" : "200199980",
              "Flags" : 0,
              "OwnerCount" : 1,
              "Sequence" : 3
            },
            "LedgerEntryType" : "AccountRoot",
            "LedgerIndex" :
"6E1082BBEB2F4BF8B7AF06A8E3D21D1F6AFBF4224C3ECD0CF6FEF533C8866A2D",
            "PreviousFields" : {
              "Balance" : "200099980"
            },
            "PreviousTxnID" :
"787F2C289E2C00AF53040F7902F290F86006674B6DB072178265878AEA49660B",
            "PreviousTxnLgrSeq" : 69126
          }
        ]
      }
    }
  }
}
```

```

    },
    {
      "ModifiedNode" : {
        "FinalFields" : {
          "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
          "Balance" : "399775470",
          "Flags" : 8388608,
          "OwnerCount" : 1,
          "Sequence" : 56
        },
        "LedgerEntryType" : "AccountRoot",
        "LedgerIndex" :
"AA22EEB13821659B8316218C1D78606FD9C57C3192C2104EB7B0920AA30FF6C6",
        "PreviousFields" : {
          "Balance" : "399875480",
          "Sequence" : 55
        },
        "PreviousTxnID" :
"CA3D11C02B6353E757BBCB6C2CFD3E6EEA562057C09417BDF348212F64A34D38",
        "PreviousTxnLgrSeq" : 242019
      }
    },
    "TransactionIndex" : 0,
    "TransactionResult" : "tesSUCCESS",
    "delivered_amount" : "100000"
  },
  "status" : "success",
  "validated" : true
}
}

```

## 4 Transactions with a Memo

### 4.1 Transactions Request

Add a Memo during the transaction, as follows:

```

"Memos": [{"Memo": "687474703a2f2f6578616d706c652e636f6d2f6d656d6f2f67656e65726963", "MemoType":

```

```
"72656e74"}]]
```

The specific command is as follows:

```
sdchaind -q submit ss3ZBtHP[REDACTED]9ryGE4Kuf
'{"TransactionType":"Payment","Account":"6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA","Amount":"100000","Destination":"64tWfk1p355SXFkQzidknmZhNaiskcxpbZ","Memos": [{"MemoType":
{"MemoType":
"687474703a2f2f6578616d706c652e63666d2f6d656d6f2f67656e65726963","MemoData":
"72656e74"}]]}'
```

## 4.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "engine_result" : "tesSUCCESS",
    "engine_result_code" : 0,
    "engine_result_message" : "The transaction was applied. Only final in a validated ledger.",
    "status" : "success",
    "tx_blob" :
"12000022800000002400000038614000000000186A068400000000000000A732103EAC169
AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C87446304402207BAB
0D1317696D14FBA50EF752F460C5ABC9F1EA1EC182B9868BA90744793E3402206E6DD3CCBF
A7E7629C079D1A40506163276EB78ADECF701C0B97D18B26B582C881142E244E6F20104E57
C0C60BD823CB312BF10928C78314F0182925994B6A50B795814CB6FE8FBF40AE2015F9EA7C1
F687474703A2F2F6578616D706C652E63666D2F6D656D6F2F67656E657269637D0472656E74
E1F1",
    "tx_json" : {
      "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
      "Amount" : "100000",
      "Destination" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
      "Fee" : "10",
      "Flags" : 2147483648,
      "Memos" : [
        {
          "Memo" : {
            "MemoData" : "72656E74",
            "MemoType" :
"687474703A2F2F6578616D706C652E63666D2F6D656D6F2F67656E65726963"
```



```

    }
  }
],
"Sequence" : 56,
"SigningPubKey" :
"03EAC169AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C8",
"TransactionType" : "Payment",
"TxnSignature" :
"304402207BAB0D1317696D14FBA50EF752F460C5ABC9F1EA1EC182B9868BA90744793E3402
206E6DD3CCBFA7E7629C079D1A40506163276EB78ADEC7F01C0B97D18B26B582C8",
"hash" :
"BA4860759824DED3A4B0ECDDBB565A4FFB43019262ABA234674F47DB4776C856"
}
}
}

```

### 4.3 Result response

sdchaind	-q	tx
BA4860759824DED3A4B0ECDDBB565A4FFB43019262ABA234674F47DB4776C856		

### 4.4 Results query

```

{
  "id" : 1,
  "result" : {
    "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
    "Amount" : "100000",
    "Destination" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
    "Fee" : "10",
    "Flags" : 2147483648,
    "Memos" : [
      {
        "Memo" : {
          "MemoData" : "72656E74",
          "MemoType" :
"687474703A2F2F6578616D706C652E636F6D2F6D656D6F2F67656E65726963"
        }
      }
    ],
    "IsFrequency" : 56,
  }
}

```

```

    "SigningPubKey" :
    "03EAC169AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C8",
    "TransactionType" : "Payment",
    "TxnSignature" :
    "304402207BAB0D1317696D14FBA50EF752F460C5ABC9F1EA1EC182B9868BA90744793E3402
    206E6DD3CCBFA7E7629C079D1A40506163276EB78ADEC7F01C0B97D18B26B582C8",
    "date" : 565759821,
    "hash" :
    "BA4860759824DED3A4B0ECDDBB565A4FFB43019262ABA234674F47DB4776C856",
    "inLedger" : 242398,
    "ledger_index" : 242398,
    "meta" : {
      "AffectedNodes" : [
        {
          "ModifiedNode" : {
            "FinalFields" : {
              "Account" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
              "Balance" : "200299980",
              "Flags" : 0,
              "OwnerCount" : 1,
              "Sequence" : 3
            },
            "LedgerEntryType" : "AccountRoot",
            "LedgerIndex" :
    "6E1082BBEB2F4BF8B7AF06A8E3D21D1F6AFBF4224C3ECD0CF6FEF533C8866A2D",
            "PreviousFields" : {
              "Balance" : "200199980"
            },
            "PreviousTxnID" :
    "3BA64F565592AAA2631E85BAC76499F63A21C46200E827C7FAB7A0A5212375ED",
            "PreviousTxnLgrSeq" : 242329
          }
        },
        {
          "ModifiedNode" : {
            "FinalFields" : {
              "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
              "Balance" : "399675460",
              "Flags" : 8388608,
              "OwnerCount" : 1,
              "Sequence" : 57
            },
            "LedgerEntryType" : "AccountRoot",
            "LedgerIndex" :

```

```

"AA22EEB13821659B8316218C1D78606FD9C57C3192C2104EB7B0920AA30FF6C6",
    "PreviousFields" : {
        "Balance" : "399775470",
        "Sequence" : 56
    },
    "PreviousTxnID": "
3BA64F565592AAA2631E85BAC76499F63A21C46200E827C7FAB7A0A5212375ED ",
    "PreviousTxnLgrSeq" : 242329
    }
    }
    ],
    "TransactionIndex" : 0,
    "TransactionResult" : "tesSUCCESS",
    "delivered_amount" : "100000"
},
"status" : "success",
"validated" : true
}
}

```

## 5 With multiple Memos of the transaction

### 5.1 Transaction request

Add multiple Memos to the transaction, as follows:

```

"Memos": [
  {
    "Memo": "687474703a2f2f6578616d706c652e636f6d2f6d656d6f2f67656e65726963",
    "MemoType": "72656e74"},
    {
    "Memo": "616161",
    "MemoType": "616161",
    "MemoData": "abcdef"}
  ]

```

The specific command is as follows:

```

sdchaind -q submit ss3ZBtHP[REDACTED]yGE4Kuf
'{"TransactionType": "Payment", "Account": "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA", "Amount": "100000", "Destination": "64tWfk1p355SXFkQzidkNmZhNaiskcXpbZ", "Memos": [
  {
    "MemoType": "72656e74",
    "Memo": "687474703a2f2f6578616d706c652e636f6d2f6d656d6f2f67656e65726963",
    "MemoData": "72656e74"},
    {
    "MemoType": "616161",
    "Memo": "616161",
    "MemoData": "abcdef"}
  ]
}'

```

## 5.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "engine_result" : "tesSUCCESS",
    "engine_result_code" : 0,
    "engine_result_message" : "The transaction was applied. Only final in a validated ledger.",
    "status" : "success",
    "tx_blob" :
"120000228000000024000000396140000000000186A0684000000000000000A732103EAC169
AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C87447304502210099
51A65F271CCE1F434A80BC27CE85A85012FAF743DBF5D6A969F3CC3EAAE12B02205ED40212
9349C222EF7993AFFAADD83B01A2A30ACCFCCADFD020E73900FE5B7881142E244E6F20104E
57C0C60BD823CB312BF10928C78314F0182925994B6A50B795814CB6FE8FBF40AE2015F9EA7
C1F687474703A2F2F6578616D706C652E636F6D2F6D656D6F2F67656E657269637D0472656E
74E1EA7C036161617D03ABCDEF1F1",
    "tx_json" : {
      "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
      "Amount" : "100000",
      "Destination" : "64tWfk1p355SXFkQzidknmZhNaiskcxbZ",
      "Fee" : "10",
      "Flags" : 2147483648,
      "Memos" : [
        {
          "Memo" : {
            "MemoData" : "72656E74",
            "MemoType" :
"687474703A2F2F6578616D706C652E636F6D2F6D656D6F2F67656E65726963"
          }
        },
        {
          "Memo" : {
            "MemoData" : "ABCDEF",
            "MemoType" : "616161"
          }
        }
      ],
      "Sequence" : 57,
      "SigningPubKey" :
"03EAC169AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C8",
      "TransactionType" : "Payment",
    }
  }
}
```

```
      "TxnSignature" :
      "30450221009951A65F271CCE1F434A80BC27CE85A85012FAF743DBF5D6A969F3CC3EAAE12B
02205ED402129349C222EF7993AFFAADD83B01A2A30ACCFCCADFD020E73900FE5B78",
      "hash" :
      "298A5151EE7CA90E9F003F11C1515B91C226E3747AB4362D711522138EF7B7A9"
    }
  }
}
```

### 5.3 Results query

sdchaind	-q	tx
298A5151EE7CA90E9F003F11C1515B91C226E3747AB4362D711522138EF7B7A9		

### 5.4 Result response

```
{
  "id" : 1,
  "result" : {
    "Account" : "6nUy2SHThB9DubsPmkJZUXTf5FcNDGhYEA",
    "Amount" : "100000",
    "Destination" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
    "Fee" : "10",
    "Flags" : 2147483648,
    "Memos" : [
      {
        "Memo" : {
          "MemoData" : "72656E74",
          "MemoType" :
          "687474703A2F2F6578616D706C652E636F6D2F6D656D6F2F67656E65726963"
        }
      },
      {
        "Memo" : {
          "MemoData" : "ABCDEF",
          "MemoType" : "616161"
        }
      }
    ],
    "Sequence" : 57,
    "SigningPubKey" :
  }
```

```

"03EAC169AF572EB52038D1C51F7E5B9C94CE34A7FBB714860BE001BDE25A4B03C8",
  "TransactionType" : "Payment",
  "TxnSignature" :
"30450221009951A65F271CCE1F434A80BC27CE85A85012FAF743DBF5D6A969F3CC3EAAE12B
02205ED402129349C222EF7993AFFAADD83B01A2A30ACCFCCADFD020E73900FE5B78",
  "date" : 565759911,
  "hash" :
"298A5151EE7CA90E9F003F11C1515B91C226E3747AB4362D711522138EF7B7A9",
  "inLedger" : 242428,
  "ledger_index" : 242428,
  "meta" : {
    "AffectedNodes" : [
      {
        "ModifiedNode" : {
          "FinalFields" : {
            "Account" : "64tWfk1p355SXFkQzidknmZhNaiskcxpbZ",
            "Balance" : "200399980",
            "Flags" : 0,
            "OwnerCount" : 1,
            "Sequence" : 3
          },
          "LedgerEntryType" : "AccountRoot",
          "LedgerIndex" :
"6E1082BBEB2F4BF8B7AF06A8E3D21D1F6AFBF4224C3ECD0CF6FEF533C8866A2D",
          "PreviousFields" : {
            "Balance" : "200299980"
          },
          "PreviousTxnID" :
"BA4860759824DED3A4B0ECDDBB565A4FFB43019262ABA234674F47DB4776C856",
          "PreviousTxnLgrSeq" : 242398
        }
      },
      {
        "ModifiedNode" : {
          "FinalFields" : {
            "Account": 6nUy "2SHThB9DubsPmkJZUXTf5FcNDGhYEA ",
            "Balance" : "399575450",
            "Flags" : 8388608,
            "OwnerCount" : 1,
            "Sequence" : 58
          },
          "LedgerEntryType" : "AccountRoot",
          "LedgerIndex" :
"AA22EEB13821659B8316218C1D78606FD9C57C3192C2104EB7B0920AA30FF6C6",

```

```

        "PreviousFields" : {
            "Balance" : "399675460",
            "Sequence" : 57
        },
        "PreviousTxnID" :
"BA4860759824DED3A4B0ECDDDB565A4FFB43019262ABA234674F47DB4776C856",
        "PreviousTxnLgrSeq" : 242398
    }
}
},
"TransactionIndex" : 0,
"TransactionResult" : "tesSUCCESS",
"delivered_amount" : "100000"
},
"status" : "success",
"validated" : true
}
}

```

## 6 View Help information

### 6.1 Transaction request

The specific command is as follows:

```
./Sdchaind -H
```

### 6.2 Transaction response

```
}sdchaind[options] <command> </command>params>
```

General Options:

-h [ --help ]	Display this message.
--conf arg	Specify the configuration file.
--rpc	Perform rpc command (default).
--rpc_ip arg	Specify the IP address for RPC command. Format: ip-address>[':'<port-number>]</port-number>
--rpc_port arg	Specify the port number for RPC command.
-a [ --standalone ]	Run with no peers.
-u [ --unittest ] arg	Perform unit tests.

--unittest-arg arg	Supplies argument to unit tests.
--unittest-log arg	Force unit test log output, even in quiet mode.
--parameters arg	Specify comma separated parameters.
-q [ --quiet ]	Reduce diagnostics.
--quorum arg	Override the minimum validation quorum.
--silent	No output to the console after startup.
-v [ --verbose ]	Verbose logging.
--load	Load the current ledger from the local DB.
--valid	Consider the initial ledger a valid network ledger.
--replay	Replay a ledger close.
--ledger arg	Load the specified ledger and start from assigned block height.
--ledgerfile arg	Load the specified ledger file.
--start	Start from a fresh Ledger.
--net	Get the initial ledger from the network.
--debug	Enable normally suppressed debug logging
--fg	Run in the foreground.
--import	Import an existing node database (specified in the [import_db] configuration file section) into the current node database (specified in the [node_db] configuration file section).
--version	Display the build version.

#### Commands:

```

account_currencies<account> [<ledger>] [strict]</ledger></account>
account_info<account>| <seed>|</seed></account>pass_phrase| <key> [<ledger>]
[strict]</ledger></key>
account_lines<account> <account>|"" [<ledger>]</ledger></account></account>
account_channels<account> <account>|"" [<ledger>]</ledger></account></account>
account_objects<account> [<ledger>] [strict]</ledger></account>
account_offers<account>|</account>account_public_key> [<ledger>]</ledger>
account_tx accountID [ledger_min [ledger_max [limit [offset]]]] [binary] [count]
[descending]
book_offerstaker_pays>taker_gets> [<taker></taker><ledger> [</ledger><limit>[<proof>
[<marker>]]]]</marker></proof></limit>
can_delete [<ledgerid>|<ledgerhash>|now|always|never]
channel_authorizeprivate_key>channel_id><drops></drops>
channel_verifypublic_key>channel_id> <drops> <signature></signature></drops>
connectip> [<port>]</port>
consensus_info
feature [<feature> [</feature>accept|reject]]
fetch_info [clear]
gateway_balances[<ledger>] </ledger>issuer_account> [hotwallet> [hotwallet> ]]
get_counts
json<method> </method>json>

```



```
ledger [<id>|</id>current|closed|validated] [full]
  ledger_accept
  ledger_closed
  ledger_current
  ledger_request<ledger></ledger>
  log_level[[<partition>] <severity></severity></partition>
  logrotate
  peers
  ping
  random
  sdchain ...
  sdchain_path_findjson> [<ledger>]</ledger>
  version
  server_info
  sign <private_key> <tx_json> [offline]
  sign_for <signer_address> <signer_private_key> <tx_json> [offline]
  stop
  submit <tx_blob>| [<private_key> <tx_json>]
  submit_multisigned <tx_json>
  tx<id></id>
  validation_create[<seed>|</seed>pass_phrase>| <key>]</key>
  validation_seed[<seed>|</seed>pass_phrase>| <key>]</key>
  wallet_propose[<passphrase>]</passphrase>
```

## 7 View node Information

### 7.1 Transaction request

The specific command is as follows:

```
sdchaind server_info
```

### 7.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "info" : {
      "build_version" : "0.60.2",
```

```

"complete_ledgers" : "2211-116274",
"hostid" : "sdchain-node-Singapore",
"io_latency_ms" : 1,
"last_close" : {
  "converge_time_s" : 2,
  "proposers" : 0
},
"load" : {
  "job_types" : [
    {
      "job_type" : "ledgerRequest",
      "per_second" : 2
    },
    {
      "in_progress" : 1,
      "job_type" : "clientCommand"
    },
    {
      "job_type" : "peerCommand",
      "per_second" : 4
    },
    {
      "job_type" : "SyncReadNode",
      "per_second" : 1
    },
    {
      "job_type" : "WriteNode",
      "per_second" : 1
    }
  ],
  "threads" : 4
},
"load_factor" : 1,
"peers" : 1,
"pubkey_node" :
"n9LUxYk3119KwFYVj6xeAUepfmFpiWfjyF2V8Fmyt6Hg21GEpLQZ",
"pubkey_validator" :
"n9M2JkDT2WWAo1iaPTag9rxjGQDwC7dnnvyxUfVsZNrAe2CPnu6p",
"server_state" : "proposing",
"state_accounting" : {
  "connected" : {
    "duration_us" : "0",
    "transitions" : 0
  },

```

```

    "disconnected" : {
      "duration_us" : "1456026",
      "transitions" : 1
    },
    "full" : {
      "duration_us" : "83096770987",
      "transitions" : 3
    },
    "syncing" : {
      "duration_us" : "11002681",
      "transitions" : 3
    },
    "tracking" : {
      "duration_us" : "178",
      "transitions" : 3
    }
  },
  "uptime" : 83109,
  "validated_ledger" : {
    "age" : 4,
    "base_fee_sda" : 1e-05,
    "hash" :
"86ED5D17D8ECD37EB8F6FD11B25A121A348A947AB56C9B8F5F1CEF3E8C6A8AF7",
    "reserve_base_sda" : 20,
    "reserve_inc_sda" : 5,
    "seq" : 116274
  },
  "validation_quorum" : 1
},
"status" : "success"
}
}

```

Comments:

Among "status", "success" indicates that the current node is running normally.

## 8 View and set the log level

### 8.1 View Request

The specific command is as follows:

```
sdchaind log_level
```

### 8.2 View answers

```
{
  "id" : 1,
  "result" : {
    "levels" : {
      "Amendments" : "Warning",
      "Application" : "Warning",
      "Collector" : "Warning",
      "Consensus" : "Warning",
      "FeeVote" : "Warning",
      "InboundLedger" : "Warning",
      "JobQueue" : "Warning",
      "Ledger" : "Warning",
      "LedgerCleaner" : "Warning",
      "LedgerConsensus" : "Warning",
      "LedgerHistory" : "Warning",
      "LedgerMaster" : "Warning",
      "LedgerTiming" : "Warning",
      "LoadManager" : "Warning",
      "LoadMonitor" : "Warning",
      "ManifestCache" : "Warning",
      "NetworkOPs" : "Warning",
      "NodeObject" : "Warning",
      "OpenLedger" : "Warning",
      "OrderBookDB" : "Warning",
      "Overlay" : "Warning",
      "PathRequest" : "Warning",
      "Peer" : "Warning",
      "PeerFinder" : "Warning",
      "Protocol" : "Warning",
      "RPC" : "Warning",
```

```
    "RPCHandler" : "Warning",
    "Resolver" : "Warning",
    "Resource" : "Warning",
    "SHAMap" : "Warning",
    "SHAMapStore" : "Warning",
    "Server" : "Warning",
    "TaggedCache" : "Warning",
    "TimeKeeper" : "Warning",
    "TxQ" : "Warning",
    "Validations" : "Warning",
    "ValidatorList" : "Warning",
    "ValidatorSite" : "Warning",
    "View" : "Warning",
    "WALCheckpoint" : "Warning",
    "base" : "Warning"
  },
  "status" : "success"
}
```

### 8.3 Set up requests

```
sdchaind log_level debug
```

Comments:

The log\_level values that can be set include: trace, debug, info, warning, error, and fatal

Depending on different levels, details of output log are different.

### 8.4 Set up an Answer

```
{
  "id" : 1,
  "result" : {
    "status" : "success"
  }
}
```

## 9 View trading Details

### 9.1 Transaction request

The specific command is as follows:

```
sdchaind tx E5684BFCEDE95B0539839E1B757401D5E27478E2567502C86C0972567A67933F
```

Comments:

Tx is followed by the hash value of the transaction record.

### 9.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "Account" : "6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh",
    "Amount" : "1000",
    "Destination" : "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
    "Fee" : "10",
    "Flags" : 2147483648,
    "Sequence" : 27,
    "SigningPubKey" :
"0330E7FC9D56BB25D6893BA3F317AE5BCF33B3291BD63DB32654A313222F7FD020",
    "TransactionType" : "Payment",
    "TxnSignature" :
"30440220399965A5C60B9E38D7CB235CAA729A67BAD0C853FFCE8E2E6C82E76F208284440
2203D7ECC9ECFDA3A45DFD9109C97BCBD8F67B73990EEC5C3C73D0259455D1E72CF",
    "date" : 573729581,
    "hash" :
"E5684BFCEDE95B0539839E1B757401D5E27478E2567502C86C0972567A67933F",
    "inLedger" : 116596,
    "ledger_index" : 116596,
    "meta" : {
      "AffectedNodes" : [
        {
          "ModifiedNode" : {
            "FinalFields" : {
              "Account" : "6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh",
              "Balance" : "20997720",
```

```

        "Flags" : 0,
        "OwnerCount" : 0,
        "Sequence" : 28
    },
    "LedgerEntryType" : "AccountRoot",
    "LedgerIndex" :
"2B6AC232AA4C4BE41BF49D2459FA4A0347E1B543A4C92FCEE0821C0201E2E9A8",
    "PreviousFields" : {
        "Balance" : "20998730",
        "Sequence" : 27
    },
    "PreviousTxnID" :
"F8B2D9DBFD8CB1A3DEB864822305DE574EDAB60C355DD108B663C63F7535E476",
    "PreviousTxnLgrSeq" : 116592
}
},
{
    "ModifiedNode" : {
        "FinalFields" : {
            "Account" : "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
            "Balance" : "82001000",
            "Flags" : 0,
            "OwnerCount" : 0,
            "Sequence" : 1
        },
        "LedgerEntryType" : "AccountRoot",
        "LedgerIndex" :
"35C97BB2890349B177A9DAF1DA5B5631C0F07B6F25059BB0E5136C38606A6395",
        "PreviousFields" : {
            "Balance" : "82000000"
        },
        "PreviousTxnID" :
"B973619E24F6B016AC5259E6ED0C43D352F3F6BC2471FBEF722B4998194B1527",
        "PreviousTxnLgrSeq" : 92532
    }
}
},
    "TransactionIndex" : 0,
    "TransactionResult" : "tesSUCCESS",
    "delivered_amount" : "1000"
},
    "status" : "success",
    "validated" : true
}

```

```
}
```

## 10 Inquire account transaction Information

### 10.1 Transaction request

The specific command is as follows:

```
sdchaind account_tx 6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc 116000 116672
```

Comments:

The starting and ending values for the block height are as follows:

```
"ledger_index_min" : 116000,  
"ledger_index_max" : 116672,
```

After the execution is successful, all transaction records of the account 6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc in this interval will be returned.

### 10.2 Transaction response

```
{  
  "id" : 1,  
  "result" : {  
    "account" : "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",  
    "ledger_index_max" : 116672,  
    "ledger_index_min" : 116000,  
    "status" : "success",  
    "transactions" : [  
      {  
        "meta" : {  
          "AffectedNodes" : [  
            {  
              "ModifiedNode" : {  
                "FinalFields" : {  
                  "Account" : "6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh",  
                  "Balance" : "20997720",  
                  "Flags" : 0,  
                  "OwnerCount" : 0,  

```



```

        "Sequence" : 28
      },
      "LedgerEntryType" : "AccountRoot",
      "LedgerIndex" :
"2B6AC232AA4C4BE41BF49D2459FA4A0347E1B543A4C92FCEE0821C0201E2E9A8",
      "PreviousFields" : {
        "Balance" : "20998730",
        "Sequence" : 27
      },
      "PreviousTxnID" :
"F8B2D9DBFD8CB1A3DEB864822305DE574EDAB60C355DD108B663C63F7535E476",
      "PreviousTxnLgrSeq" : 116592
    }
  },
  {
    "ModifiedNode" : {
      "FinalFields" : {
        "Account" : "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
        "Balance" : "82001000",
        "Flags" : 0,
        "OwnerCount" : 0,
        "Sequence" : 1
      },
      "LedgerEntryType" : "AccountRoot",
      "LedgerIndex" :
"35C97BB2890349B177A9DAF1DA5B5631C0F07B6F25059BB0E5136C38606A6395",
      "PreviousFields" : {
        "Balance" : "82000000"
      },
      "PreviousTxnID" :
"B973619E24F6B016AC5259E6ED0C43D352F3F6BC2471FBEF722B4998194B1527",
      "PreviousTxnLgrSeq" : 92532
    }
  }
],
"TransactionIndex" : 0,
"TransactionResult" : "tesSUCCESS",
"delivered_amount" : "1000"
},
"tx" : {
  "Account" : "6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh",
  "Amount" : "1000",
  "Destination" : "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
  "Fee" : "10",

```

```

        "Flags" : 2147483648,
        "Sequence" : 27,
        "SigningPubKey" :
"0330E7FC9D56BB25D6893BA3F317AE5BCF33B3291BD63DB32654A313222F7FD020",
        "TransactionType" : "Payment",
        "TxnSignature" :
"30440220399965A5C60B9E38D7CB235CAA729A67BAD0C853FFCE8E2E6C82E76F208284440
2203D7ECC9ECFDA3A45DFD9109C97BCBD8F67B73990EEC5C3C73D0259455D1E72CF",
        "date" : 573729581,
        "hash" :
"E5684BFCED95B0539839E1B757401D5E27478E2567502C86C0972567A67933F",
        "inLedger" : 116596,
        "ledger_index" : 116596
    },
    "validated" : true
}
]
}
}

```

## 11 View consensus information

### 11.1 Transaction request

The specific command is as follows:

```
sdchaind consensus_info
```

### 11.2 Transaction response

```

{
  "id" : 1,
  "result" : {
    "info" : {
      "acquired" :
[ "0000000000000000000000000000000000000000000000000000000000000000" ],
      "close_granularity" : 10,
      "close_percent" : 20,
      "close_resolution" : 10,

```

```

        "current_ms" : 1000,
        "have_time_consensus" : false,
        "ledger_seq" : 116822,
        "our_position" : {
            "close_time" : 573730258,
            "previous_ledger" :
"B39C1987E51C57A9CB0E3CEEEF4EDD6FE47577DD3B0092A5C2A2359938503351",
            "propose_seq" : 0,
            "transaction_hash" :
"0000000000000000000000000000000000000000000000000000000000000000"
        },
        "previous_mseconds" : 1999,
        "previous_proposers" : 0,
        "proposers" : 0,
        "proposing" : true,
        "state" : "consensus",
        "synched" : true,
        "validating" : true
    },
    "status" : "success"
}
}

```

## 12 Generate node Validation information

### 12.1 Transaction request

The specific command is as follows:

```
./sdchaind validation_create
```

### 12.2 Transaction response

```

{
    "id" : 1,
    "result" : {
        "status" : "success",
        "validation_key" : "WAG GRIN ROLL GAG GIN LAND NINA MIRE SEEN DOOR SWIM
HERE",
    }
}

```

```

    "validation_private_key" :
    "pfp8gPLZggoRyZLbyx22BoeF7j1QdsTfcxJdsrQTYAEciJWK2BG",
    "validation_public_key" :
    "n9K4wB1CACyG5hU71qm3D1HxYQBJBrvKqtFYreUNbmusXsjFvod2",
    "validation_seed" : "ssLoGyc[REDACTED]cB56ANvZPoo"
  }
}

```

Comments:

Generate information of authenticated public key for a node:

```

"validation_public_key" : "n9K4wB1CACyG5hU71qm3D1HxYQBJBrvKqtFYreUNbmusXsjFvod2",
"validation_seed" : "ssLoGyc[REDACTED]cB56ANvZPoo"

```

Putting the validation\_public\_key and validation\_seed values above into the configuration files of other nodes allows other nodes to act as verification nodes and to network with this node. For details, see the Node Access document.

## 13 Retrieve account Address

### 13.1 Transaction request

The specific command is as follows:

```
./sdchaind wallet_propose ssKGe4[REDACTED]GmonEySgnN
```

Comments:

The private key can retrieve the account address and public key information.

which ssKGe4[REDACTED]GmonEySgnN As the private key.

### 13.2 Transaction response

```

{
  "id" : 1,
  "result" : {

```

```

    "account_id" : "6K4HzSpDXZP8ZND7rugMxmNnJyDZQ6s4UJ",
    "key_type" : "secp256k1",
    "master_key" : "FADE GOUT CITE TOWN HUCK LAM JAVA LIN DOLE HALT MASK HEEL",

    "master_seed" : "ss3ZBtHP[REDACTED]yGE4Kuf",
    "master_seed_hex" : "2C839BC9D299A4A046BC69779BE9F17C",
    "public_key" : "aB4dVJrdv7kjQ6kTzwMvgmWCdpEbUs7GTuWPbgpzoXD32oXso3Vf",
    "public_key_hex" :
"025886EAB4F2E4C881D49EEAAA0727D0BBB4B9A7898E0800325ED5E2C93DCB5756",
    "status" : "success",
    "warning" : "This wallet was generated using a user-supplied passphrase. It may be
vulnerable to brute-force attacks."
  }
}

```

## 14 Connect the specified node

### 14.1 Transaction request

The specific command is as follows:

```
./sdchaind connect 45.76.69.152
```

### 14.2 Transaction response

```

{
  "id" : 1,
  "result" : {
    "message" : "connecting",
    "status" : "success"
  }
}

```

## 15 View node Information

### 15.1 Transaction request

The specific command is as follows:

```
./sdchaind peers
```

### 15.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "cluster" : {},
    "peers" : [
      {
        "address" : "45.76.69.152:44951",
        "complete_ledgers" : "1 - 115670",
        "inbound" : true,
        "latency" : 319,
        "load" : 170,
        "public_key" : "n9LFnDTLjwAnHF9zUtkkATW5cPRMqKJS7u6x6zcmtzdSjKtszsf2",
        "uptime" : 16,
        "version" : "sdchaind-0.60.2"
      }
    ],
    "status" : "success"
  }
}
```

## 16 Stop node Service

### 16.1 Transaction request

The specific command is as follows:

```
./sdchaind stop
```

## 16.2 Transaction response

```
{
  "id" : 1,
  "result" : {
    "message" : "sdchain server stopping",
    "status" : "success"
  }
}
```