

***TekRADIUS SP***

**Rate Editor  
Installation & Configuration Guide  
Version 5.3**

## Document Revision 8.1

<https://www.kaplansoft.com/TekRADIUS/>

TekRADIUS is built by Yasin KAPLAN

**Read “Readme.txt” for last minute changes and updates which can be found under application directory.**

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*TekRADIUS contains code derived from the RSA Data Security, Inc. MD4 Message-Digest Algorithm.*

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## TekRADIUS Service Provider (SP) Edition

VoIP Billing feature supported only by SP Edition. Requirements for SP edition:

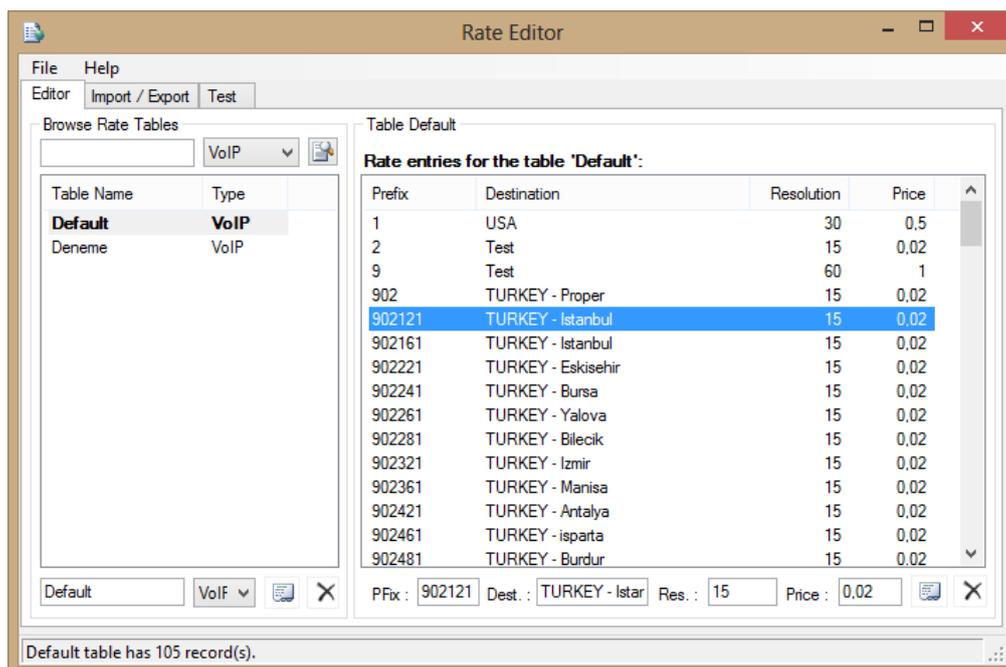
- **Vendor:** Supported RADIUS Vendors are Cisco, Quintum and Epygi. (*Your Access Server is not needed to be one of these vendors, most VoIP vendors support Cisco VoIP attributes*).
- **RADIUS Attributes:** There must be Cisco, Quintum or Epygi VSA 24 (H323-Conf-Id) found in RADIUS Authentication and Accounting request packets in order TekRADIUS to assume that incoming packet belongs to a VoIP session. Accounting made based on “originate” call leg (VSA 26).
- **TekRADIUS Configuration:** VoIP Billing must be enabled in order TekRADIUS to process incoming RADIUS packets belong to VoIP sessions. You can enable VoIP Billing using TekRADIUS Manager; check Settings / Service Parameters / Accounting / VoIP Billing Enabled option.

You must have “Rates” SQL table under TekRADIUS database with at least “Default” Rate table. You can use TekRADIUS Rate Editor to create “Rates” SQL table and its entries. Use **User-Credit** (*Add as a check attribute in user profiles*) attribute to assign credits to VoIP users in TekRADIUS. You can optionally add **Credit-Type** unit to user or group profiles.

### TekRADIUS Rate Editor

TekRADIUS Rate Editor is used to create rate tables for VoIP services. TekRADIUS must be installed prior to installation of Rate Editor. Rate Editor reads settings of TekRADIUS to access TekRADIUS database.

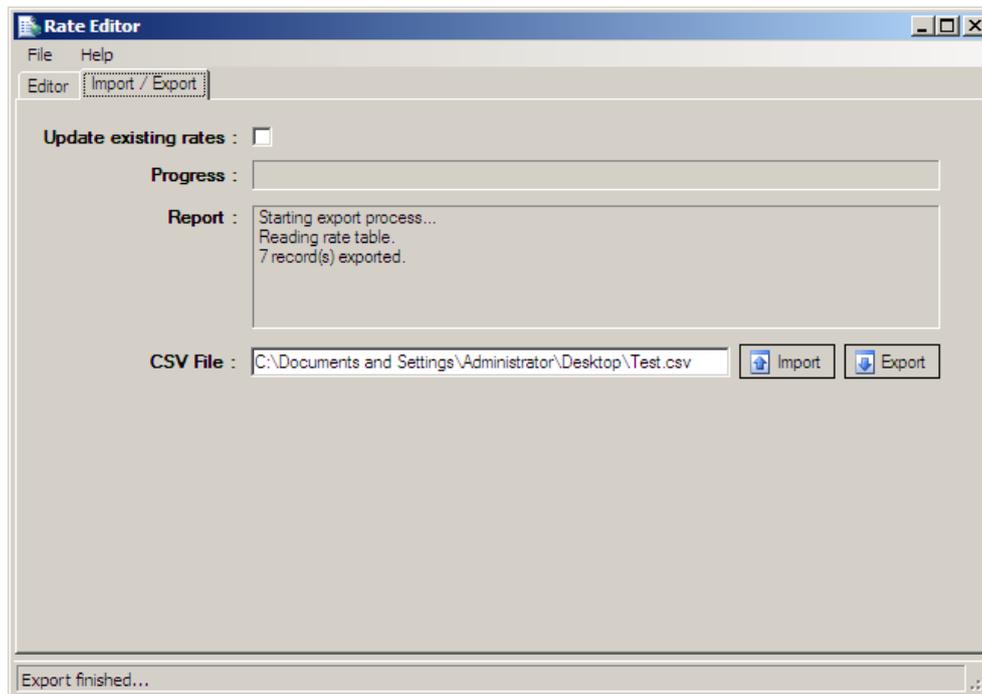
Rate Editor checks if “Rate” table exists in TekRADIUS database at first run. If not, Rate Editor automatically creates “Rate” table.



Set Price = 0 if you do not want to be billed calls for the particular prefix.

You can create rate tables either manually or using Import function. Each rate table must have its own unique name. You can define prefix based rates after creating a rate list group. You can specify a rate table for a user or group profile by adding Rate-Table as a check attribute to the user or group profile.

Every rate entry has four fields; Prefix, a description for the Destination, Billing Period (*Resolution in seconds*) and Price for the billing period.



Rate Editor can import text files having rate entries. Every line must contain six fields separated with semi-colons (*Table;Prefix;Destination;Resolution;Price;Type*). Here is a sample of import file (*VoIP type billing*);

```
Default;1;USA;30;0.5;VoIP
Default;90212;Istanbul, Turkey;30;1;VoIP
Default;90532;Turkcell;5;2;VoIP
Default;9054;Vodafone;5;2;VoIP
Default;9055;Avea;5;2;VoIP
Default;90232;Izmir;30;2;VoIP
Test;90;Turkey, PSTN;1;1;VoIP
```

Click [Import] button at “Import/Export” tab to import a rate file. If you do not check “Update existing rates” option, Rate Editor will skip importing new entry if an existing rate entry found. You can also export rate entries in the database by clicking [Export] button.

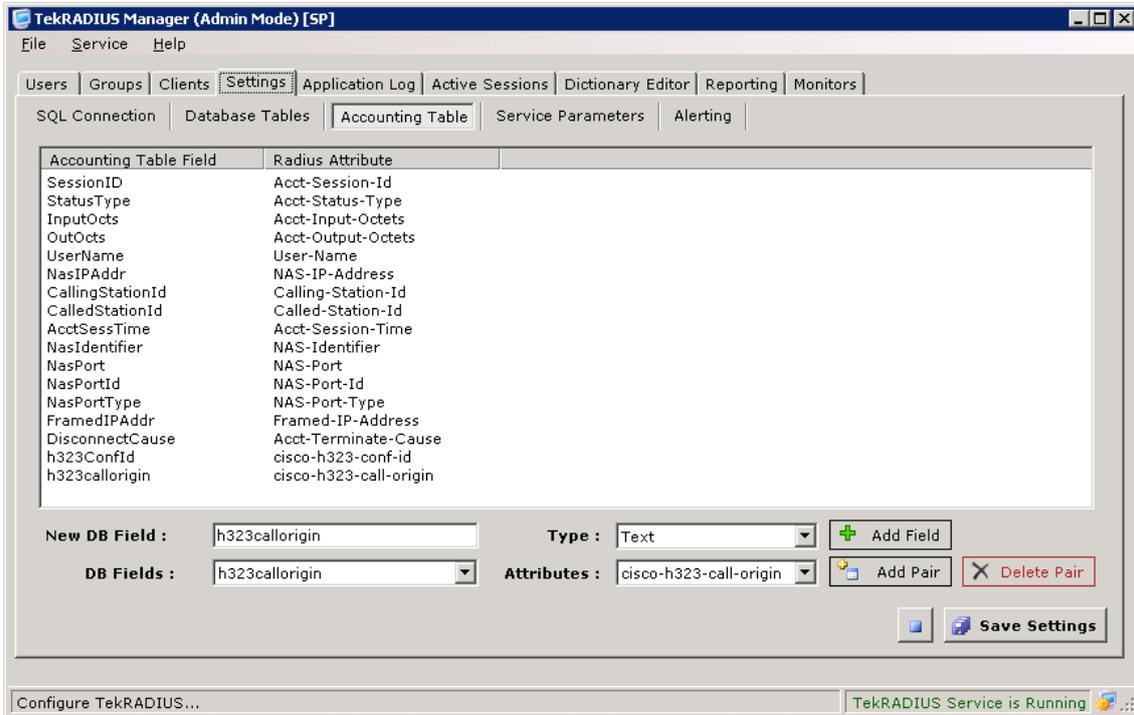
## ***Credit and Charged Amount Calculation***

TekRADIUS calculates authorized credit using following formula;

Authorized Amount = (User Credit / Price) x Resolution

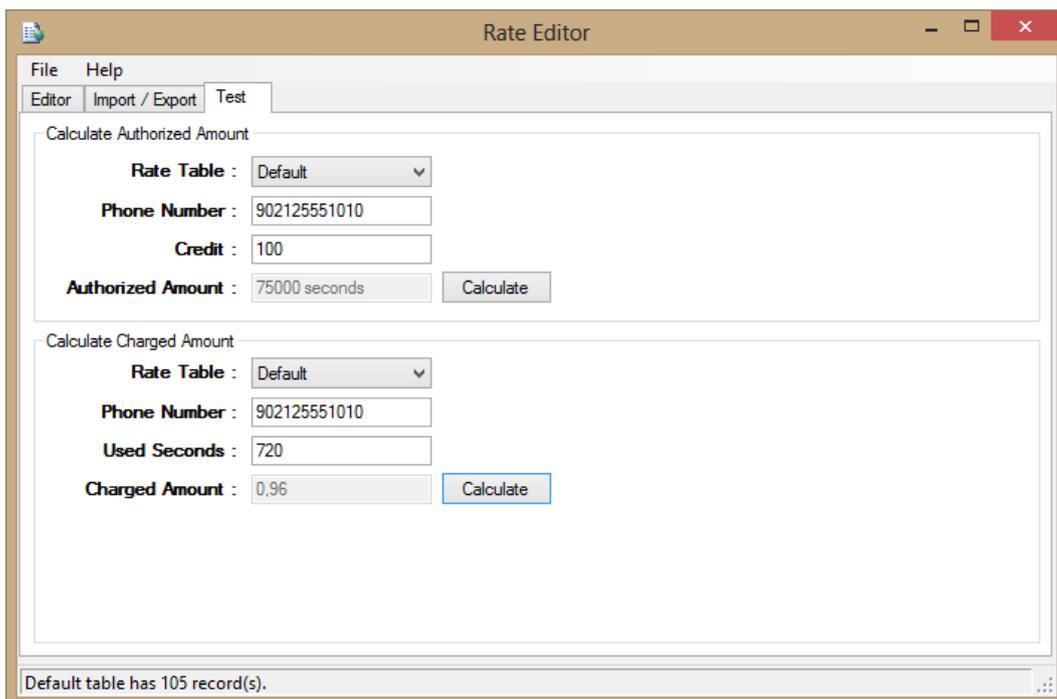
TekRADIUS calculates charged amount when user session ends using following formula;  
 Charged Amount = (Duration / Resolution) x Price

You must have mappings for h323-conf-id and h323-call-origin attributes in Accounting Table settings for proper operation.



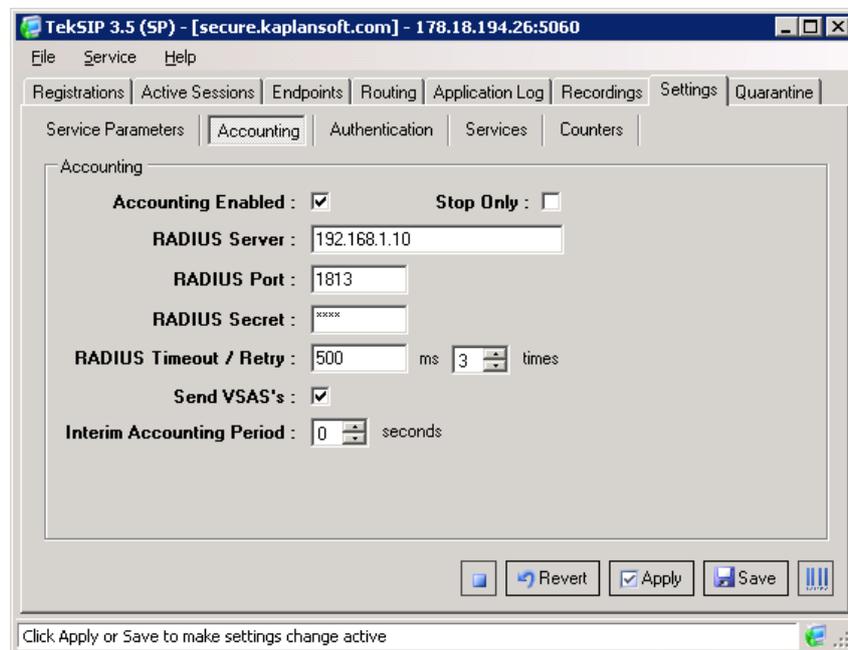
Cisco- h323-conf-id and Cisco- h323-call-origin attributes are mapped in the example above. You need to map correct attributes based on your vendor (*Quintum, AudioCodes etc...*).

You can simulate authorization and charging functions in test tab.

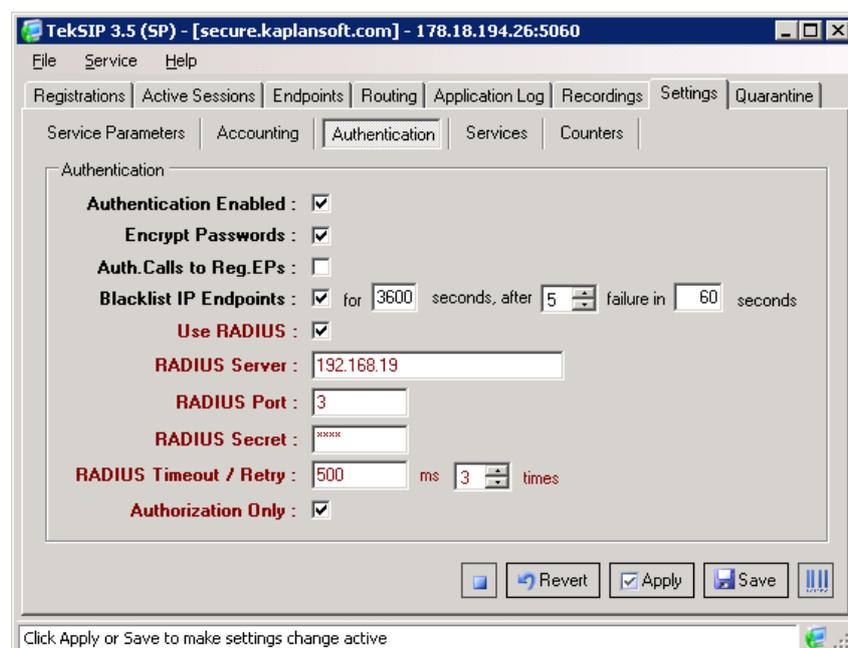


## TekSIP Application Notes

TekSIP SP edition provides SIP session control in conjunction with a RADIUS server. You need a RADIUS server which supports VoIP authorization. TekRADIUS SP edition supports VoIP authorization with billing. You can request a trial key for SP editions of TekRADIUS and TekSIP from KaplanSoft. You need to enable both RADIUS accounting and authentication in TekSIP.



You must set **Send VSA's** option to send VoIP vendor specific attributes. You can optionally enable sending interim RADIUS updates to the RADIUS server by setting **Interim Accounting Period** value greater than zero.



You must set Authorization Only options in RADIUS authentication options. TekSIP will not send RADIUS digest authentication attributes for VoIP calls (*INVITE requests*) when this parameter is set.

You must also set Auth. Calls to Reg.EPs if you plan to bill local calls between registered endpoints.