ACTAtek SOAP API Manual

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1.17	2009/07/16	Add new API getUserCount and getUserBatch	Rodel
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ACTAtek SOAP API Manual

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Chapter 1. Introduction

1.1. Prerequisite

This document is intended for software engineers who have basic knowledge in programming, XML and TCP/IP network.

1.2. Coverage

This document will cover ACTAtek SOAP API functions provided by ACTAtek, and a brief description on WebService Proxy generation in different languages.

1.3. SOAP

SOAP provides a XML based infrastructure for exchanging structured and typed information between peers in a decentralized, distributed environment.

1.4. Web Service Definition Language (WSDL)

WSDL, in general, is an XML file describing the details of how to call the Web Service it provides. In ACTAtek, the WSDL file can be accessed through the following URL:
http://<deviceIP>/soap/document/ACTAtek.wsdl

Chapter 2. SOAP API Reference

Due to language independency of SOAP WebServices, the calling syntax would depend on the actual language for client implementation. Without loss of generosity, we would describe the API in terms of the function name, parameter name, parameter type, return parameter name, return type. In case of fault, the fault string will describe the what the actual problem is. For the exact definition, please refer the actual WSDL file.

General Flow of Operation

When you access any function, you need to give a session ID. The session ID can be obtained through the login function. You can execute multiple functions using the same session ID. The session ID would represent the login user during the execution process. When you finish using the service, you have to logout the session by giving the session ID for system cleanup, although, the system can expire the unused session ID for 30 minutes by default.

2.1. Datatype Definition

2.1.1. Status

Element	*Type*	*Description*
active	xsd:boolean	
autoMatch	xsd:boolean	
smartCard	xsd:boolean	
fingerprint	xsd:boolean	
password	xsd:boolean	

Table 1.Status Data Type Definition

2.1.2. Fingerprint

Element	*Type*	*Description*
image	xsd:base64Binary	Fingerprint template

Table 2.Fingerprint Data Type Definition

2.1.3. FingerprintArray

Element	Type	Description
fingerprint	ns:fingerprint	Array of fingerprint templates

Table 3.FingerprintArrary Data Type Definition

2.1.4. Department

Element	Type	Description
departmentID	xsd:int	
departmentName	xsd:string	
departmentDescription	xsd:string	

Table 4.Department Data Type Definition

2.1.5. DepartmentArray

Element	Type	Description
department	ns:Department	

Table 5.DepartmentArray Data Type Definition

2.1.6. Weekday

Element	Type	Description

Weekday	enum
	{
	SUNDAY, MONDAY,
	TUESDAY, WEDNESDAY,
	THURSDAY, FRIDAY,
	SATURDAY, HOLIDAY
	}	

Table 6.Weekday Data Type Definition

2.1.7. Timespec

Element	Type	Description
weekday	xsd:Weekday[]	
timePattern	xsd:string	

Table 7.Timespec Data Type Definition

Element: timePattern (string) (48-byte strings of '0'(off) and/or '1'(on))

Remark: First byte representing timeslot [00:00-00:29], 2nd byte [00:30-00:59] etc.

2.1.8. AccessRight

Element	Type	Description
accessID	xsd:int	
terminalSN	xsd:string	
quickAccess	xsd:boolean	
timeSpec	ns:Timespec	

Table 8.AccessRight Data Type Definition

2.1.9. Group

Element	Type	Description
groupID	xsd:int	
groupName	xsd:string	
departmentID	xsd:int	
accessRight	ns:AccessRight	

Table 9.Group Data Type Definition

2.1.10. GroupArray

Element	Type	Description
group	ns:Group	

Table 10.GroupArray Data Type Definition

2.1.11. AdminLevel

Element	Type	Description

AdminLevel	xsd:enum
	{
	PERSONALUSER,
	NETWORKADMIN,
	USERADMIN,
	SUPERADMIN
	}	

Table 11.AdminLevel Data Type Definition

2.1.12. FingerprintSecurityLevel

Element	Type	Description

FingerprintSecurityLevel	xsd:enum
	{
	LOW, NORMAL,
	HIGH, HIGHEST
	}	

Table 12.FingerprintSecurityLevel Data Type Definition

2.1.13. User

Element	Type	Description
userID	xsd:string	User ID
lastName	xsd:string	Last name
firstName	xsd:string	First name
otherName	xsd:string	Other name
usePassword	xsd:boolean	Enable password verification
password	xsd:string	Password for login and verification
adminLevel	xsd:AdminLevel	Administration level
groupID	xsd:int[]	Access Group ID
departmentID	xsd:int[]	Department ID
fingerprintSecurityLevel	xsd:FingerprintSecurityLevel	Fingerprint security level
status	xsd:Status	
fingerprints	xsd:Fingerprint[]	Array of fingerprint template
cardsn	xsd:string	Smartcard serial number
fpgroupid	xsd:int	FP group id max value of 255

Table 13.User Data Type Definition

2.1.14. UserArray

Element	Type	Description
user	ns:User	

Table 14.UserArray Data Type Definition

2.1.15. userID

Element	Type	Description
userID	xsd:string	User ID

Table 15.userID Data Type Definition

2.1.16. UserIDArray

Element	Type	Description
uids	ns:userID	

Table 16.UserIDArray Data Type Definition

2.1.17. TriggerType

Element	Type	Description

triggerType	xsd:enum
	{
	_UNKNOWN,
	_IN, _OUT,
	_F1, _F2, _F3, _F4, _F5,
	_F6, _F7, _F8, _F9, _F10
	}	

Table 17.TriggerType Data Type Definition

2.1.18. Trigger

Element	Type	Description
triggerType	xsd:triggerType	
triggerName	xsd:string	
timeSpec	xsd:Timespec	

Table 18.Trigger Data Type Definition

2.1.19. TriggerArray

Element	Type	Description
trigger	ns:Trigger	

Table 19.TriggerArray Data Type Definition

2.1.20. eventType

Element	Type	Description

eventType	enum:
	{
	UNKNOWN,
	IN, OUT,
	F1, F2, F3, F4, F5, F6, F7,
	F8, F9, F10,
	ID_UNKNOWN, REJECTED,
	ID_RESERVED,
	RESET_ALL,
	RESET_ACC,
	RESET_DEVICE,
	RESET_PASSWORD,
	RESET_DEFAULT,
	SYSTEM_LOGIN,
	ADMIN_LOGIN,
	USER_LOGIN,
	NETWORK_CHANGE,
	PATCHED, BACKUP_DB,
	RESTORE_DB,
	SYSTEM_RSVD,
	ENROLL_USER,
	UPDATE_USER,
	REMOVE_USER,
	SUSPEND_USER,
	EDIT_EVENT,
	RESET_ADMIN_PW,
	ADMIN_RSVD
	}	

Table 20.eventType Data Type Definition

2.1.21. Log

Element	Type	Description
logID	xsd:long	
userID	xsd:string	
timestamp	xsd:dateTime	
trigger	xsd:eventType	
terminalSN	xsd:string	

Table 21.Log Data Type Definition

2.1.22. LogArray

Element	Type	Description
log	ns:Log	

Table 22.LogArray Data Type Definition

2.1.23. LogDetail

Element	Type	Description
logID	xsd:long	
userID	xsd:string	
userName	xsd:string	[first name] [last name]
departmentName	xsd:string	
timestamp	xsd:dateTime	
trigger	xsd:eventType	
terminalSN	xsd:string	
terminalName	xsd:string	
jpegPhoto	xsd:base64binary	
remark	xsd:string	

Table 23.LogDetail Data Type Definition

2.1.24. LogDetailArray

Element	Type	Description
log	ns:LogDetail	

Table 24.LogDetailArray Data Type Definition

2.1.25. getLogsCriteria

Element	Type	Description
from	xsd:dateTime	
to	xsd:dateTime	
employeeName	xsd:string	
employeeID	xsd:string	
departmentID	xsd:int	
trigger	xsd:eventType	
terminalSN	xsd:string	

Table 25.getLogsCriteria Data Type Definition

2.1.26. getUsersCriteria

Element	Type	Description
userID	xsd:string	
partialUserID	xsd:string	
lastName	xsd:string	
firstName	xsd:string	
otherName	xsd:string	
departmentID	xsd:int	

Table 26.getUsersCriteria Data Type Definition

2.1.27. getGroupsCriteria

Element	Type	Description
groupID	xsd:int	
departmentID	xsd:int	

Table 27.getGroupsCriteria Data Type Definition

2.1.28. getTriggersCriteria

Element	Type	Description
triggerType	ns:triggerType	

Table 28.getTriggersCriteria Data Type Definition

2.1.29. Agent

Element	Type	Description
port	xsd:int	
ip	xsd:string	
registrationTime	xsd:dateTime	
lastUpdate	xsd:dateTime	
lastCheck	xsd:dateTime	
lastCheckStatus	xsd:boolean	
active	xsd:boolean	
link	xsd:string	

Table 29.Agent Data Type Definition

2.1.30. AgentArrary

Element	Type	Description
agents	ns:Agent	

Table 30.AgentArray Data Type Definition

2.1.31. TerminalStatus

Element	Type	Description
modelNumber	xsd:string	
serialNumber	xsd:string	
firmwareVersion	xsd:string	
FAMVersion	xsd:string	
description	xsd:string	
registeredUsers	xsd:int	
maximumUsers	xsd:int	
automatchUsers	xsd:int	
maximumAutomatchUsers	xsd:int	

Table 31.TerminalStatus Data Type Definition

2.1.32. Terminal

Element	Type	Description
terminalID	xsd:int	
terminalType	xsd:string	
terminalName	xsd:string	
terminalSN	xsd:string	
terminalIP	xsd:string	

Table 32.Terminal Data Type Definition

2.1.33. TerminalArray

Element	Type	Description
terminal	ns:Terminal	
size	int	

Table 33.TerminalArray Data Type Definition

2.1.34. AutoInOutOption

Element	Type	Description

AutoInOutOption	enum: {
	DISABLE,
	ENABLE,
	SPECIAL,
	REJECTREPEATEDLOGIN
	}	

Table 34.AutoInOutOption Data Type Definition

2.1.35. RelayID

Element	Type	Description

RelayID	enum: {
	ONE,
	TWO,
	ALL
	}	

Table 35.RelayID Data Type Definition

2.1.36. RelayOption

Element	Type	Description

RelayOption	enum: {
	RELAY-DISABLE,
	ACCESS-GRANTED,
	ACCESS-DENIED,
	DOORBELL,
	BELLSCHEDULE
	}
		Relay One only able to set RELAY-DISABLE or ACCESS-GRANTED

Table 36.RelayOption Data Type Definition

2.1.37. JobCodeSettings

Element	Type	Description
jobcode	xsd : int	
jobcodeName	xsd : string	Name or Description
enable	xsd : int	

Table 37.JobCodeSettings Data Type Definition

2.1.38. JobCodeSettingsArray

Element	Type	Description
ptrjobcodesettings	ns : JobCodeSettings	Array of JobCodeSettings
size	xsd : int	Size of Array

Table 38.JobCodeSettingsArray Data Type Definition

2.1.39. JobCode

Element	Type	Description
JobCodeID	xsd : int	Int value minimum value of 1 maximum of 999999
JobCodeDescription	xsd : string	Description
enable	xsd : int	Bit 0: ● 0 : IN ● 1 : OUT Bit 1: ● 0 : Normal ● 1 : Default Bit 2: ● 0 : Enabled ● 1 : Disabled
jobcode	xsd : int	Jobcode value from jobcodesettings

Table 39.JobCode Data Type Definition

2.1.40. JobCodeArray

Element	Type	Description
ptrjobcodes	ns : JobCode	Array of JobCode
size	xsd : string	Size of Array

Table 40.JobCodeArray Data Type Definition

2.2. SOAP API

2.2.1. Session Establishment

2.2.1.1. login

2.2.1.1.1. Arguments

- **username**, xsd:string
- **password**, xsd:string

2.2.1.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:login>
   <username></username>
   <password></password>
  </ns:login>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.1.1.3. Return

- **sessionID**, xsd: long

2.2.1.2. logout

2.2.1.2.1. Arguments

- **sessionID**, xsd:long

2.2.1.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:logout>
  <sessionID>0</sessionID>
 </ns:logout>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.1.2.3. Return

- **status**, xsd: string

2.2.2. Log Management

2.2.2.1. getLogs

2.2.2.1.1. Arguments

- **sessionID**, xsd:long
- **getLogsCriteria**, xsd:getLogsCriteria

2.2.2.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getLogs>
   <sessionID>0</sessionID>
   <getLogsCriteria>
    <from>2005-08-22T10:25:59Z</from>
    <to>2005-08-22T10:25:59Z</to>
    <employeeName></employeeName>
    <employeeID></employeeID>
    <departmentID>0</departmentID>
    <trigger>UNKNOWN</trigger>
   <terminalSN></terminalSN>
   </getLogsCriteria>
  </ns:getLogs>
```

```
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.2.1.3. Return

- **logs**, xsd:LogArray[]

2.2.2.2. getFullLogs

2.2.2.2.1. Arguments

- **sessionID**, xsd:long
- **getLogsCriteria**, xsd:getLogsCriteria

2.2.2.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getFullLogs>
   <sessionID>0</sessionID>
   <getLogsCriteria>
    <from>2006-09-22T09:30:08Z</from>
    <to>2006-09-22T09:30:08Z</to>
    <employeeName></employeeName>
    <employeeID></employeeID>
    <departmentID>0</departmentID>
    <trigger>UNKNOWN</trigger>
    <terminalSN></terminalSN>
   </getLogsCriteria>
   <limit>0</limit>
  </ns:getFullLogs>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.2.2.3. Return

- **logs**, xsd:LogDetailArray[]

2.2.2.3. getLogPhoto

2.2.2.3.1. Arguments

- **sessionID**, xsd:long
- **terminalSN**, xsd:string
- timestamp, xsd:dateTime

2.2.2.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getLogPhoto>
   <sessionID>0</sessionID>
   <terminalSN></terminalSN>
   <timestamp></timestamp>
  </ns:getLogPhoto>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.2.3.3. Return

- **jpegPhoto**, xsd:base64Binary

2.2.2.4. addLog

2.2.2.4.1. Arguments

- **sessionID**, xsd:long
- **timestamp**, xsd:dateTime
- **employeeID**, xsd:string
- **event**, xsd:eventType
- **terminalSN**, xsd:string

2.2.2.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
```

```
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:addLog>
  <sessionID>0</sessionID>
  <timestamp></timestamp>
  <employeeID></employeeID>
  <event>UNKNOWN</event>
  <terminalSN></terminalSN>
 </ns:addLog>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.2.4.3. Return

- **status**, xsd:string

2.2.2.5. deleteLogs

(since 29.11)

Delete all logs, keeping only those added since `daysToKeep` days from today (00:00:00, local time today).

2.2.2.5.1. Arguments

- **sessionID**, xsd:long
- **daysToKeep,** the number of days from today, the logs will not be deleted. It cannot be > 366. Value of 0 will not delete those logs added today. To delete all logs use resetLog

2.2.2.5.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:deleteLogs>
   <sessionID>0</sessionID>
   <daysToKeep>0</daysToKeep>
  </ns:deleteLogs>
 </SOAP-ENV:Body>
```

```
</SOAP-ENV:Envelope>
```

2.2.2.5.3. Return

- **status**, xsd:string

2.2.2.6. resetLog

2.2.2.6.1. Arguments

- **sessionID**, xsd:long

2.2.2.6.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:resetLog>
   <sessionID>0</sessionID>
  </ns:resetLog>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.2.6.3. Return

- **status**, xsd:string

2.2.3. User Management

2.2.3.1. addUser

2.2.3.1.1. Arguments

- **sessionID**, xsd:long
- **user**, xsd:User

2.2.3.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
```

```
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:addUser>
  <sessionID>0</sessionID>
  <user>
   <userID></userID>
   <lastName></lastName>
   <firstName></firstName>
   <otherName></otherName>
   <adminLevel>PERSONALUSER</adminLevel>
   <usePassword>false</usePassword>
   <password></password>
   <groupID>0</groupID>
   <departmentID>0</departmentID>
   <fingerprintSecurityLevel>LOW</fingerprintSecurityLevel>
   <status>
    <active>false</active>
    <autoMatch>false</autoMatch>
    <smartCard>false</smartCard>
    <fingerprint>false</fingerprint>
    <password>false</password>
   </status>
   <fingerprints
    <fingerprint>
     <image></image>
    </fingerprint>
   </fingerprints>
   <cardsn></cardsn>
  </user>
 </ns:addUser>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.1.3. Return

- **userID**, xsd:string

2.2.3.2. addUsers

2.2.3.2.1. Arguments

- **sessionID**, xsd:long
- **users,** xsd:UserArray

2.2.3.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:addUsers>
   <sessionID>0</sessionID>
   <users>
    <user>
     <userID></userID>
     <lastName></lastName>
     <firstName></firstName>
     <otherName></otherName>
     <adminLevel>PERSONALUSER</adminLevel>
     <usePassword>false</usePassword>
     <password></password>
     <groupID>0</groupID>
     <departmentID>0</departmentID>
     <fingerprintSecurityLevel>LOWEST</fingerprintSecurityLevel>
     <status>
      <active>false</active>
      <autoMatch>false</autoMatch>
      <smartCard>false</smartCard>
      <fingerprint>false</fingerprint>
      <password>false</password>
     </status>
     <fingerprints
      <fingerprint>
       <image></image>
```

```
    </fingerprint>
   </fingerprints>
   <cardsn></cardsn>
  </user>
 </users>
</ns:addUsers>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.2.3. Return

- **uids**, xsd:UserIDArray

2.2.3.3. getUsers

2.2.3.3.1. Arguments

- **sessionID**, xsd:long
- **getUsersCriteria**, xsd:getUsersCriteria

2.2.3.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getUsers>
   <sessionID>0</sessionID>
   <getUsersCriteria>
    <userID></userID>
    <partialUserID></partialUserID>
    <lastName></lastName>
    <firstName></firstName>
    <otherName></otherName>
    <departmentID>0</departmentID>
   </getUsersCriteria>
  </ns:getUsers>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.3.3. Return

- **users**, xsd:UserArray

2.2.3.4. updateUser

2.2.3.4.1. Arguments

- **sessionID**, xsd:long
- **userID**, xsd:string
- **user**, xsd:User

2.2.3.4.2. WSDL

```
<<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateUser>
   <sessionID>0</sessionID>
   <userID></userID>
   <user>
    <userID></userID>
    <lastName></lastName>
    <firstName></firstName>
    <otherName></otherName>
    <adminLevel>PERSONALUSER</adminLevel>
    <usePassword>false</usePassword>
    <password></password>
    <groupID>0</groupID>
    <departmentID>0</departmentID>
    <fingerprintSecurityLevel>LOW</fingerprintSecurityLevel>
    <status>
     <active>false</active>
     <autoMatch>false</autoMatch>
     <smartCard>false</smartCard>
     <fingerprint>false</fingerprint>
     <password>false</password>
    </status>
    <fingerprints
```

```
    <fingerprint>
     <image></image>
    </fingerprint>
   </fingerprints>
   <cardsn></cardsn>
  </user>
 </ns:updateUser>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.4.3. Return

- **status**, xsd:string

2.2.3.5. updateUsers

2.2.3.5.1. Arguments

- **sessionID**, xsd:long
- **uids**, xsd:UserIDArray
- **users**, xsd:UserArray

2.2.3.5.2. WSDL

```
<<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:updateUsers>
  <sessionID>0</sessionID>
  <uids>
   <userID>
    <userID></userID>
   </userID>
  </uids>
  <users>
   <user>
    <userID></userID>
    <lastName></lastName>
    <firstName></firstName>
```

```
    <otherName></otherName>
    <adminLevel>PERSONALUSER</adminLevel>
    <usePassword>false</usePassword>
    <password></password>
    <groupID>0</groupID>
    <departmentID>0</departmentID>
    <fingerprintSecurityLevel>LOWEST</fingerprintSecurityLevel>
    <status>
     <active>false</active>
     <autoMatch>false</autoMatch>
     <smartCard>false</smartCard>
     <fingerprint>false</fingerprint>
     <password>false</password>
    </status>
    <fingerprints
     <fingerprint>
      <image></image>
     </fingerprint>
    </fingerprints>
    <cardsn></cardsn>
   </user>
  </users>
 </ns:updateUsers>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.5.3. Return

- **status**, xsd:string

2.2.3.6. deleteUser

2.2.3.6.1. Arguments

- **sessionID**, xsd:long
- **userID**, xsd:string

2.2.3.6.2. WSDL

```
?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:deleteUser>
  <sessionID>0</sessionID>
  <userID></userID>
 </ns:deleteUser>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.6.3. Return

- **status**, xsd:string

2.2.3.7. activateUser

2.2.3.7.1. Arguments

- **sessionID**, xsd:long
- **userID**, xsd:string

2.2.3.7.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:activateUser>
   <sessionID>0</sessionID>
   <userID></userID>
  </ns:activateUser>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.7.3. Return

- **status**, xsd:string

2.2.3.8. deactivateUser

2.2.3.8.1. Arguments

- **sessionID**, xsd:long

- **userID**, xsd:string

2.2.3.8.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:deactivateUser>
   <sessionID>0</sessionID>
   <userID></userID>
  </ns:deactivateUser>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.8.3. Return

- **status**, xsd:string

2.2.3.9. getUserMessage

2.2.3.9.1. Arguments

- **sessionID**, xsd:long
- **userID**, xsd:string

2.2.3.9.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getUserMessage>
   <sessionID>0</sessionID>
   <userID></userID>
  </ns:getUserMessage>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.9.3. Return

- **message**, xsd:string

2.2.3.10. updateUserMessage

2.2.3.10.1. Arguments

- **sessionID**, xsd:long
- **userID**, xsd:string
- **message**, xsd:string

2.2.3.10.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateUserMessage>
   <sessionID>0</sessionID>
   <userID></userID>
   <message></message>
  </ns:updateUserMessage>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.10.3. Return

- **status**, xsd:string

2.2.3.11. deleteUserMessage

2.2.3.11.1. Arguments

- **sessionID**, xsd:long
- **userID**, xsd:string

2.2.3.11.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:deleteUserMessage>
  <sessionID>0</sessionID>
  <userID></userID>
 </ns:deleteUserMessage>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.11.3. Return

- **status**, xsd:string

2.2.3.12. getUserCount

2.2.3.12.1. Arguments

- **sessionID**, xsd:long

2.2.3.12.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getUserCount>
   <sessionID>0</sessionID>
  </ns:getUserCount>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.12.3. Return

- **user_count,** xsd:int

2.2.3.13. getUserBatch

2.2.3.13.1. Arguments

- **sessionID**, xsd:long
- **offset**, xsd:int
- **limit**, xsd:int

2.2.3.13.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getUserBatch>
   <sessionID>0</sessionID>
   <offset>0</offset>
   <limit>0</limit>
  </ns:getUserBatch>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.3.13.3. Return

- **users**, xsd:UserArray

2.2.4. Department Management

2.2.4.1. addDepartment

2.2.4.1.1. Arguments

- **sessionID**, xsd:long
- **department**, xsd:Department

2.2.4.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:addDepartment>
   <sessionID>0</sessionID>
   <department>
```

```
  <departmentID>0</departmentID>
  <departmentName></departmentName>
  <departmentDescription></departmentDescription>
 </department>
</ns:addDepartment>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.4.1.3. Return

- **departmentID**, xsd:int

2.2.4.2. updateDepartment

2.2.4.2.1. Arguments

- **sessionID**, xsd:long
- **departmentID**, xsd:int
- **department**, xsd:Department

2.2.4.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateDepartment>
   <sessionID>0</sessionID>
   <departmentID>0</departmentID>
   <department>
    <departmentID>0</departmentID>
    <departmentName></departmentName>
    <departmentDescription></departmentDescription>
   </department>
  </ns:updateDepartment>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.4.2.3. Return

- **status**, xsd:string

2.2.4.3. getDepartments

2.2.4.3.1. Arguments

- **sessionID**, xsd:long
- **departmentID**, xsd:int

2.2.4.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getDepartments>
   <sessionID>0</sessionID>
   <departmentID>0</departmentID>
  </ns:getDepartments>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.4.3.3. Return

- **departments**, xsd:Department[]

2.2.4.4. deleteDepartment

2.2.4.4.1. Arguments

- **sessionID**, xsd:long
- **departmentID**, xsd:int

2.2.4.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
```

```
 <ns:deleteDepartment>
  <sessionID>0</sessionID>
  <departmentID>0</departmentID>
 </ns:deleteDepartment>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.4.4.3. Return

- **status**, xsd:string

2.2.5. Access Group Management

2.2.5.1. addGroup

2.2.5.1.1. Arguments

- **sessionID**, xsd:long
- **group**, xsd:Group

2.2.5.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:addGroup>
   <sessionID>0</sessionID>
   <group>
    <groupID>0</groupID>
    <groupName></groupName>
    <departmentID>0</departmentID>
    <accessRight>
     <accessID>0</accessID>
     <terminalSN></terminalSN>
     <quickAccess>false</quickAccess>
     <timeSpec>
      <weekday>SUNDAY</weekday>
      <timePattern></timePattern>
     </timeSpec>
```

```
   </accessRight>
  </group>
 </ns:addGroup>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.5.1.3. Return

- **groupID**, xsd:int

2.2.5.2. getGroups

2.2.5.2.1. Arguments

- **sessionID**, xsd:long
- **getGroupsCriteria**, xsd:getGroups

2.2.5.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getGroups>
   <sessionID>0</sessionID>
   <getGroupsCriteria>
    <groupID>0</groupID>
    <departmentID>0</departmentID>
   </getGroupsCriteria>
  </ns:getGroups>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.5.2.3. Return

- **groups**, xsd:Group[]

2.2.5.3. updateGroup

2.2.5.3.1. Arguments

- **sessionID**, xsd:long
- **groupID**, xsd:int

- **group**, xsd:Group

2.2.5.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateGroup>
   <sessionID>0</sessionID>
   <groupID>0</groupID>
   <group>
    <groupID>0</groupID>
    <groupName></groupName>
    <departmentID>0</departmentID>
    <accessRight>
     <accessID>0</accessID>
     <terminalSN></terminalSN>
     <quickAccess>false</quickAccess>
     <timeSpec>
      <weekday>SUNDAY</weekday>
      <timePattern></timePattern>
     </timeSpec>
    </accessRight>
   </group>
  </ns:updateGroup>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.5.3.3. Return

- **status**, xsd:string

2.2.5.4. deleteGroup

2.2.5.4.1. Arguments

- **sessionID**, xsd:long
- **groupID**, xsd:int

2.2.5.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:deleteGroup>
   <sessionID>0</sessionID>
   <groupID>0</groupID>
  </ns:deleteGroup>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.5.4.3. Return

- **status**, xsd:string

2.2.6. Trigger Maintenance Functions

2.2.6.1. getTriggers

2.2.6.1.1. Arguments

- sessionID, xsd:long
- getTriggersCriteria, xsd:getTriggersCriteria

2.2.6.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getTriggers>
   <sessionID>0</sessionID>
   <getTriggersCriteria>
    <triggerType>UNKNOWN</triggerType>
   </getTriggersCriteria>
```

```
 </ns:getTriggers>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.6.1.3. Return

- triggers, xsd:Trigger[]

  The trigger name of each trigger in the returned arrays will be prefixed with character "!" to if the trigger is disabled; no change to trigger name if enabled. Client should parse the string to set the trigger enable state accordingly

2.2.6.2. updateTrigger

2.2.6.2.1. Arguments

- sessionID, xsd:long
- trigger, xsd:Trigger

  To disable a trigger, prefix the trigger name with character "!"; to enable it, do nothing to the trigger name. For example (in JAVA), to disable trigger “F1” named “Lunch”:

```
updateTrigger(
                    sessionID,
                    new Trigger(
                    TriggerType.fromValue("F1"),
                    "!Lunch",
                     new Timespec[] {
                     new Timespec(
                     new Weekday[] { Weekday.MONDAY },
                     "00000000000000000000001111110000000000000000000000"
                     )
                    }
                   )
                  );
```

2.2.6.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateTrigger>
   <sessionID>0</sessionID>
```

```
  <trigger>
   <triggerType>UNKNOWN</triggerType>
   <triggerName></triggerName>
   <timeSpec>
    <weekday>SUNDAY</weekday>
    <timePattern></timePattern>
   </timeSpec>
  </trigger>
 </ns:updateTrigger>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.6.2.3. Return

- **status**, xsd:string

2.2.6.3. clearTrigger

2.2.6.3.1. Arguments

- sessionID, xsd:long
- trigger, xsd:Trigger

2.2.6.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:clearTrigger>
   <sessionID>0</sessionID>
   <triggerType>UNKNOWN</triggerType>
  </ns:clearTrigger>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.6.3.3. Return

- **status**, xsd:string

2.2.7. Personal Functions

2.2.7.1. getMyself

2.2.7.1.1. Arguments

- **sessionID**, xsd:long

2.2.7.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getMyself>
   <sessionID>0</sessionID>
  </ns:getMyself>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.7.1.3. Return

- **user**, xsd:user

2.2.7.2. updateMyself

2.2.7.2.1. Arguments

- **sessionID**, xsd:long
- **user**, xsd:User

2.2.7.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateMyself>
   <sessionID>0</sessionID>
```

```
<user>
 <userID></userID>
 <lastName></lastName>
 <firstName></firstName>
 <otherName></otherName>
 <adminLevel>PERSONALUSER</adminLevel>
 <usePassword>false</usePassword>
 <password></password>
 <groupID>0</groupID>
 <departmentID>0</departmentID>
 <fingerprintSecurityLevel>LOW</fingerprintSecurityLevel>
 <status>
  <active>false</active>
  <autoMatch>false</autoMatch>
  <smartCard>false</smartCard>
  <fingerprint>false</fingerprint>
  <password>false</password>
 </status>
 <fingerprints
  <fingerprint>
   <image></image>
  </fingerprint>
 </fingerprints>
 <cardsn></cardsn>
</user>
</ns:updateMyself>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.7.2.3. Return

- **status**, xsd:string

2.2.8. Agent

2.2.8.1. registerAgent

2.2.8.1.1. Arguments

- **sessionID**, xsd:long
- **ip**, xsd:string
- **port**, xsd:int
- **agentVersion**, xsd:string

- **magic**, xsd:string
- **registrationID**, xsd:int
- **initSync**, xsd:boolean

2.2.8.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:registerAgent>
   <sessionID>0</sessionID>
   <ip></ip>
   <port>0</port>
   <agentVersion></agentVersion>
   <magic></magic>
   <registrationID></registrationID>
   <initSync>false</initSync>
  </ns:registerAgent>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.8.1.3. Return

- **status**, xsd:string

2.2.8.2. unregisterAgent

2.2.8.2.1. Arguments

- **sessionID**, xsd:long
- **ip**, xsd:string
- **port**, xsd:int

2.2.8.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:unregisterAgent>
  <sessionID>0</sessionID>
  <ip></ip>
  <port>0</port>
 </ns:unregisterAgent>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.8.2.3. Return

- **status**, xsd:string

2.2.8.3. getRegisteredAgents

2.2.8.3.1. Arguments

- **sessionID**, xsd:long

2.2.8.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getRegisteredAgents>
   <sessionID>0</sessionID>
  </ns:getRegisteredAgents>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.8.3.3. Return

- **agents**, xsd:Agent[]

2.2.9. Time Settings

2.2.9.1. getSNTP

Check if SNTP server is enabled or disabled

2.2.9.1.1. Arguments

- **sessionID**, xsd:long

2.2.9.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getSNTP>
   <ns:sessionID>0</ns:sessionID>
  </ns:getSNTP>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.1.3. Return

- **enable**, xsd:boolean

  true if SNTP enabled, false if disabled

2.2.9.2. setSNTP

To enable or disable SNTP server

2.2.9.2.1. Arguments

- **sessionID**, xsd:long
- **enable**, xsd:boolean

  true if SNTP enabled, false if disabled

2.2.9.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setSNTP>
   <ns:sessionID>0</ns:sessionID>
```

```
  <ns:enable>false</ns:enable>
 </ns:setSNTP>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.2.3. Return

- **status**, xsd:string

2.2.9.3. getSNTPServer

To get SNTP server IP address

2.2.9.3.1. Arguments

- **sessionID**, xsd:long

2.2.9.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getSNTPServer>
   <ns:sessionID>0</ns:sessionID>
  </ns:getSNTPServer>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.3.3. Return

- **serveraddr**, xsd:string

  SNTP server IP address

2.2.9.4. setSNTPServer

To set SNTP server IP address

2.2.9.4.1. Arguments

- **sessionID**, xsd:long
- **serveraddr**, xsd:string

  SNTP server IP address

2.2.9.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setSNTPServer>
   <ns:sessionID>0</ns:sessionID>
   <ns:serveraddr></ns:serveraddr>
  </ns:setSNTPServer>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.4.3. Return

- **status**, xsd:string
- errorSNTP server unreachable, if the address cannot be resolved.

2.2.9.5. getTerminalDateTime

To get date time in the terminal

2.2.9.5.1. Arguments

- **sessionID**, xsd:long

2.2.9.5.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getTerminalDateTime>
   <ns:sessionID>0</ns:sessionID>
  </ns:getTerminalDateTime>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.5.3. Return

- **seconds**, xsd:datetime
  timestamp of terminal in UTC

2.2.9.6. setTerminalDateTime

To set date time in the terminal

2.2.9.6.1. Arguments

- **sessionID**, xsd:long
- **seconds**, xsd:datetime
  timestamp of terminal in UTC

2.2.9.6.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setTerminalDateTime>
   <ns:sessionID>0</ns:sessionID>
   <ns:terminalDate></ns:terminalDate>
  </ns:setTerminalDateTime>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.6.3. Return

- **status**, xsd:string

2.2.9.7. getTimeZone

To get time zone in the terminal

2.2.9.7.1. Arguments

- **sessionID**, xsd:long

2.2.9.7.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
```

```
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:getTimeZone>
  <ns:sessionID>0</ns:sessionID>
 </ns:getTimeZone>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.7.3. Return

- **timezone ID**, xsd:string

  Olson timezone ID (see the table in Chaper 7)

2.2.9.8. setTimeZone

To get time zone in the terminal

2.2.9.8.1. Arguments

- **sessionID**, xsd:long
- **timezone ID**, xsd:string

  Olson timezone ID (see the table in Chaper 7)

2.2.9.8.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setTimeZone>
   <ns:sessionID>0</ns:sessionID>
   <ns:timezone></ns:timezone>
  </ns:setTimeZone>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.9.8.3. Return

- **status**, xsd:string

2.2.10. Misc Functions

2.2.10.1. openDoor

2.2.10.1.1. Arguments

- **sessionID**, xsd:long
- **doorID**, xsd:int

2.2.10.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:openDoor>
   <sessionID>0</sessionID>
   <doorID>0</doorID>
  </ns:openDoor>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.1.3. Return

- **status**, xsd:string

2.2.10.2. getAPIVersion

2.2.10.2.1. Arguments

- NA

2.2.10.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
```

```
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getAPIVersion>
  </ns:getAPIVersion>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.2.3. Return

- **version**, xsd:string

2.2.10.3. getTerminalList

2.2.10.3.1. Arguments

- **sessionID**, xsd:long

2.2.10.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getTerminalList>
   <sessionID>0</sessionID>
  </ns:getTerminalList>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.3.3. Return

- **terminalList**, xsd:Terminal[]

2.2.10.4. getTerminalStatus

2.2.10.4.1. Arguments

- **sessionID**, xsd:long

2.2.10.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
```

```
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:getTerminalStatus>
  <sessionID>0</sessionID>
 </ns:getTerminalStatus>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.4.3. Return

- **terminalStatus**, xsd:terminalStatus[]

2.2.10.5. openRelay

2.2.10.5.1. Arguments

- **sessionID**, xsd:long
- **relayID**, ns:RelayID

2.2.10.5.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:openRelay>
  <sessionID>0</sessionID>
  <relayID>ONE</relayID>
 </ns:openRelay>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.5.3. Return

- **status**, xsd:string

2.2.10.6. closeRelay

2.2.10.6.1. Arguments

- **sessionID**, xsd:long

- **relayID**, ns:RelayID

2.2.10.6.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:closeRelay>
   <sessionID>0</sessionID>
   <relayID>ONE</relayID>
  </ns:closeRelay>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.6.3. Return

- **status**, xsd:string

2.2.10.7. systemBackup

2.2.10.7.1. Arguments

- **sessionID**, xsd:long

2.2.10.7.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:systemBackup>
   <sessionID>0</sessionID>
  </ns:systemBackup>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.7.3. Return

- **data**, xsd:base64binary

2.2.10.8. systemRestore

2.2.10.8.1. Arguments

- **sessionID**, xsd:long
- **data**, xsd:base64binary

2.2.10.8.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:systemRestore>
   <sessionID>0</sessionID>
   <ns:systemData></ns:systemData>
  </ns:systemRestore>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.10.8.3. Return

- **status**, xsd:string

2.2.11. Terminal Settings

2.2.11.1. setFPSecurityLevel

2.2.11.1.1. Arguments

- **sessionID**, xsd:long
- **fpSecurityLevel**, xsi:ns1:FingerprintSecurityLevel

2.2.11.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
```

```
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:setFpSecurityLevel>
  <sessionID>0</sessionID>
  <ns:fpSecurityLevel>LOW</ns:fpSecurityLevel>
 </ns:setFpSecurityLevel>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.1.3. Return

- **status**, xsd:string

2.2.11.2. getFPSecurityLevel

2.2.11.2.1. Arguments

- **sessionID**, xsd:long

2.2.11.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getFpSecurityLevel>
   <sessionID>0</sessionID>
  </ns:getFpSecurityLevel>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.2.3. Return

- **fpSecurityLevel**, xsi:ns1:FingerprintSecurityLevel

2.2.11.3. setRelayOption

2.2.11.3.1. Arguments

- **sessionID**, xsd:long
- **relayID**, ns:RelayID
- **relayOpt**, ns:RelayOption

2.2.11.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setRelayOption>
   <sessionID>0</sessionID>
   <relayID>ONE</relayID>
   <relayOpt>RELAY-DISABLE</relayOpt>
  </ns:setRelayOption>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.3.3. Return

- **status,** xsd:string

2.2.11.4. getRelayOption

2.2.11.4.1. Arguments

- **sessionID**, xsd:long
- **relayID**, ns:RelayID

2.2.11.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
```

```
 <ns:getRelayOption>
  <sessionID>0</sessionID>
  <relayID>ONE</relayID>
 </ns:getRelayOption>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.4.3. Return

- **relayOpt**, ns:RelayOption

2.2.11.5. setRelayDelay

2.2.11.5.1. Arguments

- **sessionID**, xsd:long
- **relayID**, ns:RelayID
- **sec,** xsd:int

2.2.11.5.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setRelayDelay>
   <sessionID>0</sessionID>
   <relayID>ONE</relayID>
   <sec>0</sec>
  </ns:setRelayDelay>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.5.3. Return

- **status**, xsd:string

2.2.11.6. getRelayDelay

2.2.11.6.1. Arguments

- **sessionID**, xsd:long

- **relayID**, ns:RelayID

2.2.11.6.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getRelayDelay>
   <sessionID>0</sessionID>
  <relayID>ONE</relayID>
  </ns:getRelayDelay>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.6.3. Return

- **sec**, xsd:int

2.2.11.7. setAutoInOut

2.2.11.7.1. Arguments

- **sessionID**, xsd:long
- **auto_in_out_option**, xsi:ns1:AutoInOutOption

2.2.11.7.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setAutoInOut>
   <sessionID>0</sessionID>
   <ns:auto-in-out-option>DISABLE</ns:auto-in-out-option>
  </ns:setAutoInOut>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.7.3. Return

- **status**, xsd:string

2.2.11.8. getAutoInOut

2.2.11.8.1. Arguments

- **sessionID**, xsd:long

2.2.11.8.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getAutoInOut>
   <sessionID>0</sessionID>
  </ns:getAutoInOut>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.8.3. Return

- **auto-in-out-option**, xsi:ns1:AutoInOutOption

2.2.11.9. setLogUnauthorizedEvent

2.2.11.9.1. Arguments

- **sessionID**, xsd:long
- **enable,** xsd:boolean

2.2.11.9.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:setLogUnauthorizedEvent>
```

```
  <sessionID>0</sessionID>
  <ns:enable>false</ns:enable>
 </ns:setLogUnauthorizedEvent>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.9.3. Return

- **status**, xsd:string

2.2.11.10. getLogUnauthorizedEvent

2.2.11.10.1. Arguments

- **sessionID**, xsd:long

2.2.11.10.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getLogUnauthorizedEvent>
   <sessionID>0</sessionID>
  </ns:getLogUnauthorizedEvent>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.10.3. Return

- **enable**, xsd: boolean

2.2.11.11. getCaptureFingerprint

2.2.11.11.1. Arguments

- **sessionID**, xsd:long

2.2.11.11.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:getCaptureFingerprint>
  <sessionID>0</sessionID>
 </ns:getCaptureFingerprint>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.11.3. Return

- **jpegPhoto**, xsd: base64Binary

2.2.11.12. initCaptureFP

2.2.11.12.1. Arguments

- **sessionID**, xsd:long

2.2.11.12.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:initCaptureFP>
   <sessionID>0</sessionID>
  </ns:initCaptureFP>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11.12.3. Return

- **jpegPhoto**, xsd: base64Binary
- **status**, xsd:string

2.2.12. Job Code

2.2.12.1. getJobCodeSettings

2.2.12.1.1. Arguments

- **sessionID**, xsd:long

2.2.12.1.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
```

```
<SOAP-ENV:Body>
 <ns:getJobCodeSettings>
  <sessionID>0</sessionID>
 </ns:getJobCodeSettings>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.12.1.3. Return

- **Jobcodesettings** : ns:JobCodeSettingsArray

2.2.12.2. updateJobCodeSettings

2.2.12.2.1. Arguments

- **sessionID**, xsd:long

2.2.12.2.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:updateJobCodeSettings>
   <sessionID>0</sessionID>
   <jobcodesettings>
    <jobcodesettings>
     <jobcode>0</jobcode>
     <jobcodeName></jobcodeName>
     <enable>0</enable>
    </jobcodesettings>
   </jobcodesettings>
  </ns:updateJobCodeSettings>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.12.2.3. Return

- **status:** xsd:string

2.2.12.3. addJobCodes

2.2.12.3.1. Arguments

- **sessionID** xsd:long
- **jobcodes** ns:JobCodeArray

2.2.12.3.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:addJobCodes>
   <sessionID>0</sessionID>
   <jobcodes>
    <jobcodes>
     <JobCodeID>0</JobCodeID>
     <JobCodeDescription></JobCodeDescription>
     <enable>0</enable>
     <jobCode>0</jobCode>
    </jobcodes>
   </jobcodes>
  </ns:addJobCodes>
 </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.12.3.3. Return

- **status:** xsd:string

2.2.12.4. updateJobCodes

2.2.12.4.1. Arguments

- **sessionID** xsd:long
- **jobcodes** ns:JobCodeArray

2.2.12.4.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
```

```
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
<SOAP-ENV:Body>
 <ns:updateJobCodes>
  <sessionID>0</sessionID>
  <jobcodes>
   <jobcodes>
    <JobCodeID>0</JobCodeID>
    <JobCodeDescription></JobCodeDescription>
    <enable>0</enable>
    <jobCode>0</jobCode>
   </jobcodes>
  </jobcodes>
 </ns:updateJobCodes>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.12.4.3. Return

- **status:** xsd:string

2.2.12.5. deleteJobCodes

2.2.12.5.1. Arguments

- **sessionID** xsd:long
- **jobcodes** ns:JobCodeArray

2.2.12.5.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:deleteJobCodes>
   <sessionID>0</sessionID>
```

```
  <jobcodes>
   <jobcodes>
    <JobCodeID>0</JobCodeID>
    <JobCodeDescription></JobCodeDescription>
    <enable>0</enable>
    <jobCode>0</jobCode>
   </jobcodes>
  </jobcodes>
 </ns:deleteJobCodes>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.12.5.3. Return

- **status:** xsd:string

2.2.12.6. getJobCodes

2.2.12.6.1. Arguments

- **sessionID** xsd:long
- **getJobCodeCriteria** ns:getJobCodeCriteria

2.2.12.6.2. WSDL

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
 xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
 xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:ns="http://www.hectrix.com/ACTAtek.xsd">
 <SOAP-ENV:Body>
  <ns:getJobCodes>
   <sessionID>0</sessionID>
   <getJobCodeCriteria>
    <jobcodeID>0</jobcodeID>
    <jobcodeDescription></jobcodeDescription>
    <enable>0</enable>
    <jobcode>0</jobcode>
   </getJobCodeCriteria>
  </ns:getJobCodes>
 </SOAP-ENV:Body>
```

```
</SOAP-ENV:Envelope>
```

2.2.12.6.3. Return

- **jobcodes:** ns:JobCodeArray

Chapter 3. Creating C Application

3.1. Requirements

- Supported OS: Windows(win32/WinCE), Linux, Sun Solaris and Mac OS X
- gSOAP 2.7

3.2. Example

Assume IP address of ACTAtek is 192.168.1.112,

Makefile

```
CC=gcc
OBJS=soapC.o soapClient.o main.o
LIBS=-lgsoap
LDFLAGS=-O2 -s
CFLAGS=-O2 -I. -I/usr/local/include
#CFLAGS+=-DDEBUG

all: $(OBJS) main

ACTAtek.wsdl:
	wget http://192.168.1.112/soap/document/ACTAtek.wsdl

ACTAtek.h: ACTAtek.wsdl
	wsdl2h -c ACTAtek.wsdl

main: $(OBJS)
	$(CC) -o $@ $(OBJS) $(LIBS) $(LDFLAGS)

soapClient.c: ACTAtek.h
	soapcpp2 -c ACTAtek.h
soapC.c: ACTAtek.h
	soapcpp2 -c ACTAtek.h

%.o: %.c
	$(CC) $(CFLAGS) -c $<

%.o: %.cpp
	$(CPP) $(CFLAGS) -c $<
```

```
clean:
	$(RM) -rf soapServerLib.* soapClientLib.* soapC.*
	$(RM) -rf soapServer.* soapClient.* soapH.* soapStub.*
	$(RM) -rf soap.* soapClient.* soapH.* soapStub.*
	$(RM) -rf soapObject.h soapProxy.h
	$(RM) -rf soapServiceObject.h soapServiceProxy.h
	$(RM) -rf ws *ACTAtek*
	$(RM) -rf *.xml *.xsd *.wsdl *.nsmap
	$(RM) -rf $(OBJS) main
	$(RM) -rf ns.h
	$(RM) -rf *~
```

main.c

```
#include "soapH.h"              // obtain the generated stub
#include "ACTAtek.nsmap"        // obtain the namespace mapping table

#define SOAP_CMD "http://192.168.1.142/cgi-bin/rpcrouter"

int main(int argc, char **argv)
{
	struct soap soap;       // gSOAP runtime environment
	soap_init(&soap);       // initialize runtime environment (only once)
	char *employeeID = NULL;
	if (argc == 2) {
		employeeID = argv[1];
	}

	// Try Login
	struct ns1__loginResponse response;
	printf("Calling...\n");
	if (soap_call_ns1__login(&soap, SOAP_CMD, NULL, "A999", \
				"1", &response) == SOAP_OK) {
		printf("Session ID: %d\n", response.ns1__sessionID);
	} else {                        // an error occurred
		soap_print_fault(&soap, stderr);
	}

	// Log search
	struct ns1__getLogsResponse getLogsResponse;
	struct ns1__getLogsCriteria lcriteria;
```

```
    memset(&criteria, 0, sizeof(criteria));
    lcriteria.employeeID = employeeID;
    if (soap_call_ns1__getLogs(&soap, SOAP_CMD, NULL, \
                        response.ns1__sessionID, &lcriteria, \
                        &getLogsResponse) == SOAP_OK) {
        if (getLogsResponse.ns1__logs) {
            int size = getLogsResponse.ns1__logs->__sizelog;
            printf("No of Logs: %d\n", size);
            int i = 0;
            for (i = 0; i < size; i++) {
                printf("  LogID: %d", getLogsResponse.ns1__logs->log[i]->logID);
                printf(", User: %s", getLogsResponse.ns1__logs->log[i]->userID);
                printf(", Trigger: %d", getLogsResponse.ns1__logs->log[i]->trigger);
                    printf(", Timestamp: %s", ctime(&(getLogsResponse.ns1__logs-
>log[i]->timestamp)));
            }
        }
    } else {            // an error occurred
        soap_print_fault(&soap, stderr);
    }

    // Try Logout
    struct ns1__logoutResponse oresponse;

    if (soap_call_ns1__logout(&soap, SOAP_CMD, NULL, \
                        response.ns1__sessionID, \
                        &oresponse) == SOAP_OK) {
        printf("LOGOUT Session ID: %d\n", response.ns1__sessionID);
    } else{             // an error occurred
        soap_print_fault(&soap, stderr);
    }
    soap_destroy(&soap);    // delete deserialized class instances (for C++ only)
    soap_end(&soap);        // remove deserialized data and clean up
    soap_done(&soap);       // detach the gSOAP environment
    return 0;
}
```

Chapter 4. Creating Visual Basic Application

4.1. Requirements

- Supported OS: Windows 98, ME, 2000, XP
- SOAP Toolkit 3.0 for Windows
- Visual Basic 6.0

4.2. Example

```
Private Sub login()
    Dim Serializer As SoapSerializer30
    Dim Connector As SoapConnector30
    Dim Reader As SoapReader30
    Dim str As String
    Dim newline As String
    Dim name As String
    Dim password As String

On Error GoTo End_this_process          ' Prevent the mistype of IP address

    Set Connector = New HttpConnector30
    Connector.Property("EndPointURL") = "http://" & Text3.Text & "/cgi-bin/rpcrouter"
    Connector.Connect

    Connector.BeginMessage

    Set Serializer = New SoapSerializer30
    Serializer.Init Connector.InputStream

    Serializer.StartEnvelope "", "STANDARD"
    Serializer.SoapNamespace "xsi", "http://www.w3.org/2001/XMLSchema-instance"
    Serializer.SoapNamespace "xsd", "http://www.w3.org/2001/XMLSchema"
    Serializer.SoapNamespace "ns1", "http://www.hectrix.com/ACTAtek.xsd"

    Serializer.StartBody
    Serializer.StartElement "ns1:login"

    name = Text1.Text
```

```
    password = Text2.Text


    Serializer.StartElement "username"
    Serializer.WriteString name
    Serializer.EndElement
    Serializer.StartElement "password"
    Serializer.WriteString password
    Serializer.EndElement

    Serializer.EndElement
    Serializer.EndBody
    Serializer.EndEnvelope

    Connector.EndMessage

    ' The following lines show how you would retrieve a result if the method returned one
    Set Reader = New SoapReader30
    Reader.Load Connector.OutputStream

    str = Reader.RpcResult.Text

    sessionID = Val(str)

    If sessionID = 0 Then      'sessionID received, login success
       status.Caption = "Login Failed"
    End If

End_this_process:
End Sub
```

Chapter 5. Creating .NET Application

5.1. Requirements

- Supported OS: 2000, XP
- Visual Studio .NET 2003

5.2. Example

Create the Web Reference using the ACTAtek.WSDL located on the terminal at

http://<deviceIP>/soap/document/ACTAtek.wsdl

This will automatically generate all the methods to access the ACTAtek API.

```
Private Sub Login()
' Login SOAP request
  Dim sessionID As Long
  Dim IP_Addr As String
  Dim UserID As String
  Dim Password As String
  IP_Addr="192.168.1.100"
  UserID ="A999
  Password="1"

  Try
    ' ACTAtekWSDL is the name of the web reference
    Dim ActaService As ACTAtekWSDL.ACTAtek =New ACTAtekWSDL.ACTAtek
    ActaService.Url = "http://" & IP_Addr & "/cgi-bin/rpcrouter"
    sessionID = ActaService.login(UserID, Password)

      Catch ex As Exception
          MsgBox(ex.Message)
  End Try

End Sub
```

Sample Code to get detail event log, Session ID is obtained from the login API request

```
Private Sub GetFullLog()
' GetFullLog SOAP Request
  Dim dateFrom As Date
  Dim dateTo As Date
  Dim EventTrigger As ACTAtekWSDL.triggerType
  Dim Trigger As String
  Dim IP_Addr As String

  IP_Addr="192.168.1.100"

  ' Get the Event Trigger
  Trigger = "IN"
  ' Retrieve Enum from its member name (Event Trigger name)
   EventTrigger=CType(System.Enum.Parse(GetType(ACTAtekWSDL.
       triggerType), Trigger), ACTAtekWSDL.triggerType)
   'parse string date into date format
    dateFrom = DateTime.Parse( "01/01/00 00:00:01")
    dateTo = Now

    Dim ActaService As ACTAtekWSDL.ACTAtek = New ACTAtekWSDL.ACTAtek
    ActaService.Url = "http://" & IP_Addr & "/cgi-bin/rpcrouter"

   Dim LogCritera As ACTAtekWSDL.getLogsCriteria
   ' Set the getLogsCriteria
   LogCritera = New ACTAtekWSDL.getLogsCriteria
   LogCritera.from = dateFrom    'Date
   LogCritera.to = dateTo    'Date
   LogCritera.departmentID = 0  ' Integer
   LogCritera.departmentIDSpecified = False ' Boolean
   LogCritera.employeeID = "" ' String
   LogCritera.employeeName = "" 'String
   LogCritera.fromSpecified = True ' Boolean
   LogCritera.toSpecified = True  ' Boolean
   LogCritera.trigger = EventTrigger ' Eventtype
   LogCritera.triggerSpecified = False ' Boolean
  LogCritera.terminaSN="" ' String
```

```
' get the output from getlog
  Dim Logs() As ACTAtekWSDL.LogDetail
  Dim log As ACTAtekWSDL.LogDetail
  Dim count As Integer
  Dim textLog As String

  Logs = ActaService.getFullLogs(SessionID, LogCritera, 1, False)
  ' Check if anything is retrieved
  If Logs Is Nothing Then
        ' No log retrieved so exit sub
    Exit Sub
  End If

   txtOutput.Text = ""
    count = 0
   'Go through each log
   For Each log In Logs
     count = count + 1
    'retrieve an Enum member (Event Trigger name),
    'cast the integer value from log.trigger to your Enum type
     EventTrigger = CType(log.trigger, ACTAtekWSDL.triggerType)
          textLog = textLog & count & ":  " & log.userName & " " & log.userID &
                    "  " & log.timestamp & " " & log.departmentName &
                    "  " & EventTrigger.ToString & " " & log.terminalName &
                    " " & log.terminalSN & " " & log.remark & vbCrLf
    Next

    txtOutput.Text = textLog

End Sub
```

Chapter 6. Creating JAVA Application

6.1. Requirements

- Apache AXIS (Java) 1.1 or later

6.2. Example

Creating Java Proxy class,

```
$ java org.apache.axis.wsdl.WSDL2Java
http://<deviceIP>/soap/document/ACTAtek.wsdl
```

It will generate the Java Proxy class and related data structures/classes that used to access the service. The generated Proxy should be used to call the remote service. You can find the proxy in the package:

```
com.hectrix.www.ACTAtek_service
```

There is a ACTAtekLocator.java generated, which can be used locate the service provided by a particular location (URL, or Service Endpoint). Sample Calling Sequence of the Login function:

```
ACTAtekLocator locator = new ACTAtekLocator();
ACTAtekPortType api = locator.getACTAtek(new
java.net.URL("http://192.168.1.100/cgi-bin/rpcrouter"));
long sessionID = api.login("A123", "123");
```

You should change the IP address appropriately to reflect the actual deployment setting of your ACTAtek. As you can see, "api" object is used to access the remote methods exposed by WSDL. Please refer to the [API] section for details of the methods provided.

For issues related the generation of Java Proxy, please refer to the Apache website. (http://ws.apache.org)

Makefile

```
JAVA_HOME=/usr/java
JAVA=$(JAVA_HOME)/bin/java
JAVAC=$(JAVA_HOME)/bin/javac

WSDL_URL=http://192.168.1.112/soap/document/ACTAtek.wsdl

CLASSPATH=lib/axis.jar:lib/jaxrpc.jar:lib/saaj.jar:lib/commons-logging.jar:lib/commons-
discovery.jar:lib/wsdl4j.jar
WSDL2JAVA=$(JAVA) -classpath $(CLASSPATH) org.apache.axis.wsdl.WSDL2Java
```

```
all: generate_java_classes Main.class

Main.class: Main.java .PROXY_GENERATED
	$(JAVAC) -classpath .:$(CLASSPATH) Main.java

runtest: Main.class .PROXY_GENERATED
	$(JAVA) -classpath .:$(CLASSPATH) Main

generate_java_classes: .PROXY_GENERATED

.PROXY_GENERATED:
	$(WSDL2JAVA) $(WSDL_URL)
	touch .PROXY_GENERATED
clean:
	rm -rf *.class com *~ .PROXY_GENERATED
```

Main.java

```
import com.hectrix.www.ACTAtek_service.*;

/*
 * Sample Calling Sequence of the Login function:
 */
public class Main {

  public static void main(String args[]) throws Exception {
    ACTAtekLocator locator = new ACTAtekLocator();
    ACTAtekPortType api = locator.getACTAtek(
          new java.net.URL("http://192.168.1.112/cgi-bin/rpcrouter"));
    long sessionID = api.login("A999", "1");
    System.out.println("SessionID="+sessionID);
    api.logout(sessionID);
  }
}
```

Chapter 7. Using SOAP API with SSL

7.1. Requirements

- Supported OS: Windows(win32/WinCE), Linux, Sun Solaris and Mac OS X
- gSOAP 2.7
- stdsoap2.c stdsoap2.h from gSOAP package

7.2. Example

Assume IP address of ACTAtek is 192.168.1.112,

Makefile

```
CC=gcc
OBJS=soapC.o soapClient.o main.o stdsoap2.o
LIBS=-lgsoap -lssl -lcrypto
LDFLAGS=-O2 -s
CFLAGS=-O2 -I. -I/usr/local/include
#CFLAGS+=-DDEBUG
CFLAGS+=-DDEBUG -DWITH_OPENSSL

all: $(OBJS) main

ACTAtek.wsdl:
	wget http://192.168.1.112/soap/document/ACTAtek.wsdl

ACTAtek.h: ACTAtek.wsdl
	wsdl2h -c ACTAtek.wsdl

main: $(OBJS)
	$(CC) -o $@ $(OBJS) $(LIBS) $(LDFLAGS)

soapClient.c: ACTAtek.h
	soapcpp2 -c ACTAtek.h
soapC.c: ACTAtek.h
	soapcpp2 -c ACTAtek.h

%.o: %.c
	$(CC) $(CFLAGS) -c $<
```

```
%.o: %.cpp
	$(CPP) $(CFLAGS) -c $<

clean:
	$(RM) -rf soapServerLib.* soapClientLib.* soapC.*
	$(RM) -rf soapServer.* soapClient.* soapH.* soapStub.*
	$(RM) -rf soap.* soapClient.* soapH.* soapStub.*
	$(RM) -rf soapObject.h soapProxy.h
	$(RM) -rf soapServiceObject.h soapServiceProxy.h
	$(RM) -rf ws *ACTAtek*
	$(RM) -rf *.xml *.xsd *.wsdl *.nsmap
	$(RM) -rf $(OBJS) main
	$(RM) -rf ns.h
	$(RM) -rf *~
```

main.c

```
#include "soapH.h"              // obtain the generated stub
#include "ACTAtek.nsmap"        // obtain the namespace mapping table

#ifdef WITH_OPENSSL
	#define SOAP_CMD "https://192.168.1.142/cgi-bin/rpcrouter"
#else
	#define SOAP_CMD "http://192.168.1.142/cgi-bin/rpcrouter"
#endif

int main(int argc, char **argv)
{
	struct soap soap;       // gSOAP runtime environment
	soap_init(&soap);       // initialize runtime environment (only once)

#ifdef WITH_OPENSSL
	printf("Before SSL init\n");
	if (soap_ssl_client_context(&soap,
		SOAP_SSL_NO_AUTHENTICATION, // SOAP_SSL_DEFAULT,
		  NULL, /* keyfile: required only when client must authenticate to server (see SSL docs on how to obtain this file) */
		NULL, /* password to read the key file */
		NULL, /* optional cacert file to store trusted certificates */
		NULL, /* optional capath to direcoty with trusted certificates */
		NULL /* if randfile!=NULL: use a file with random data to seed random */
		)) {
```

```
            soap_print_fault(&soap, stderr);
            exit(1);
            }
            printf("After SSL init\n");
#endif

      char *employeeID = NULL;
       if (argc == 2) {
            employeeID = argv[1];
       }

      // Try Login
       struct ns1__loginResponse response;
       printf("Calling...\n");
       if (soap_call_ns1__login(&soap, SOAP_CMD, NULL, "A999", \
                        "1", &response) == SOAP_OK) {
            printf("Session ID: %d\n", response.ns1__sessionID);
       } else {                    // an error occurred
            soap_print_fault(&soap, stderr);
       }

       // Log search
       struct ns1__getLogsResponse getLogsResponse;
       struct ns1__getLogsCriteria lcriteria;
       memset(&criteria, 0, sizeof(criteria));
       lcriteria.employeeID = employeeID;
       if (soap_call_ns1__getLogs(&soap, SOAP_CMD, NULL, \
                        response.ns1__sessionID, &lcriteria, \
                        &getLogsResponse) == SOAP_OK) {
            if (getLogsResponse.ns1__logs) {
                 int size = getLogsResponse.ns1__logs->__sizelog;
                 printf("No of Logs: %d\n", size);
                 int i = 0;
                 for (i = 0; i < size; i++) {
                      printf("  LogID: %d", getLogsResponse.ns1__logs->log[i]->logID);
                      printf(", User: %s", getLogsResponse.ns1__logs->log[i]->userID);
                      printf(", Trigger: %d", getLogsResponse.ns1__logs->log[i]->trigger);
                          printf(", Timestamp: %s", ctime(&(getLogsResponse.ns1__logs-
>log[i]->timestamp)));
                 }
            }
```

```
    } else {            // an error occurred
        soap_print_fault(&soap, stderr);
    }

    // Try Logout
    struct ns1__logoutResponse oresponse;

    if (soap_call_ns1__logout(&soap, SOAP_CMD, NULL, \
                    response.ns1__sessionID, \
                    &oresponse) == SOAP_OK) {
        printf("LOGOUT Session ID: %d\n", response.ns1__sessionID);
    } else{             // an error occurred
        soap_print_fault(&soap, stderr);
    }
    soap_destroy(&soap);    // delete deserialized class instances (for C++ only)
    soap_end(&soap);        // remove deserialized data and clean up
    soap_done(&soap);       // detach the gSOAP environment
    return 0;
}
```

Chapter 8. Correspondence between Time Zone Names and Time Zone IDs

Timezone Name (as seen on web interface)	Timezone ID
No Timezone	(Empty string)
(GMT -12:00:00) Eniwetok, Kwajalein	Pacific/Kwajalein
(GMT -11:00:00) Midway Island, Samoa	Pacific/Midway
(GMT -10:00:00) Hawaii	Pacific/Honolulu
(GMT -10:00:00) Alaska	America/Anchorage
(GMT -08:00:00) Pacific Time (US & Canada); Tijuana	America/Tijuana
(GMT -07:00:00) Mexican Standard Time; Chihuahua, La Paz, Mazatlan	America/Chihuahua
(GMT -07:00:00) Mountain Standard Time (US & Canada)	America/Dawson_Creek
(GMT -07:00:00) Arizona	America/Phoenix
(GMT -06:00:00) Central Standard Time (US & Canada)	America/Swift_Current
(GMT -06:00:00) Mexico City, Tegucigalpa	America/Tegucigalpa
(GMT -06:00:00) Saskatchewan	America/Regina
(GMT -06:00:00) Central America	America/Costa_Rica
(GMT -05:00:00) Eastern Standard Time (US & Canada)	America/Toronto
(GMT -05:00:00) Eastern Standard Time, Indiana (East)	America/Indiana/Indianapolis
(GMT -05:00:00) Bogota, Lima, Quito	America/Lima
(GMT -04:00:00) Atlantic Standard Time(Canada)	America/Halifax
(GMT -04:00:00) Caracas, La Pa	America/Caracas
(GMT -04:00:00) Santiago	America/Santiago
(GMT -03:30:00) Newfoundland	America/St_Johns
(GMT -03:00:00) Buenos Aires, Georgetown	America/Argentina/Buenos_Aires
(GMT -03:00:00) Brasilia	America/Sao_Paulo
(GMT -03:00:00) Greenland	America/Godthab
(GMT -02:00:00) Mid-Atlantic	America/Glace_Bay
(GMT -01:00:00) Azores	Atlantic/Azores
(GMT -01:00:00) Cape Verde Island	Atlantic/Cape_Verde
(GMT 00:00:00) Casablanca, Monrovia	Africa/Casablanca

Timezone Name (as seen on web interface)	Timezone ID
(GMT 00:00:00) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London	Europe/Lisbon
(GMT +01:00:00) Amsterdam, Copenhagen, Madrid, Paris, Vilnius	Europe/Amsterdam
(GMT +01:00:00) West Central Africa	Africa/Bangui
(GMT +01:00:00) Belgrade, Sarajevo, Skopje, Sofia, Zagreb	Europe/Skopje
(GMT +01:00:00) Bratislava, Budapest, Ljubljana, Prague, Warsaw	Europe/Bratislava
(GMT +01:00:00) Brussels, Berlin, Bern, Rome, Stockholm, Vienna	Europe/Stockholm
(GMT +02:00:00) Cairo	Africa/Cairo
(GMT +02:00:00) Harae, Pretoria	Africa/Maseru
(GMT +02:00:00) Israel	Asia/Gaza
(GMT +02:00:00) Bucharest	Europe/Bucharest
(GMT +02:00:00) Helsinki, Riga, Tallinn	Europe/Riga
(GMT +02:00:00) Athens, Istanbul, Munsk	Europe/Istanbul
(GMT +03:00:00) Kuwait, Riyadh	Asia/Riyadh
(GMT +03:00:00) Nairobi	Africa/Nairobi
(GMT +03:00:00) Baghdad	Asia/Baghdad
(GMT +03:00:00) Moscow, St. Petersburg, Volgograd	Europe/Moscow
(GMT +03:00:00) Tehran	Asia/Tehran
(GMT +04:00:00) Abu Dhabi, Muscat	Asia/Muscat
(GMT +04:00:00) Baku, Tbilisi	Asia/Tbilisi
(GMT +04:00:00) Kabul	Asia/Kabul
(GMT +05:00:00) Islamabad, Karachi, Tashkent	Asia/Tashkent
(GMT +05:00:00) Ekaterinburg	Asia/Yekaterinburg
(GMT +05:30:00) Bombay, Calcutta, Madras, New Delhi	Asia/Calcutta
(GMT +05:45:00) Kathmandu	Asia/Kathmandu
(GMT +06:00:00) Dhaka	Asia/Dhaka
(GMT +06:00:00) Colombo	Asia/Colombo
(GMT +06:00:00) Almaty, Novosibirsk	Asia/Novosibirsk
(GMT +06:30:00) Rangoon	Asia/Rangoon
(GMT +07:00:00) Bangkok, Hanoi, Jakarta	Asia/Bangkok
(GMT +07:00:00) Krasnoyarsk	Asia/Krasnoyarsk
(GMT +08:00:00) Beijing, Chongqing, Hong Kong, Urumqi	Asia/Hong_Kong
(GMT +08:00:00) Perth	Australia/Perth
(GMT +08:00:00) Singapore	Asia/Singapore
(GMT +08:00:00) Taipei	Asia/Taipei

Timezone Name (as seen on web interface)	Timezone ID
(GMT +08:00:00) Irkutsk, Ulaan Battar	Asia/Irkutsk
(GMT +09:00:00) Osaka, Sapporo, Tokyo	Asia/Tokyo
(GMT +09:00:00) Seoul	Asia/Seoul
(GMT +09:00:00) Yakutsk	Asia/Yakutsk
(GMT +09:30:00) Darwin	Australia/Darwin
(GMT +09:30:00) Adelaide	Australia/Adelaide
(GMT +10:00:00) Canberra, Melbourne, Sydney	Australia/Sydney
(GMT +10:00:00) Brisbane	Australia/Brisbane
(GMT +10:00:00) Guam, Port Moresby	Pacific/Port_Moresby
(GMT +10:00:00) Hobart	Australia/Hobart
(GMT +10:00:00) Vladivostok	Asia/Vladivostok
(GMT +11:00:00) Magadan, Solomon Island, New Caledonia	Asia/Magadan
(GMT +12:00:00) Fiji, Kamchatka, Marshall Island	Asia/Kamchatka
(GMT +12:00:00) Auckland, Wellington	Pacific/Auckland
(GMT +13:00:00) Nuku'alofa	Pacific/Tongatapu