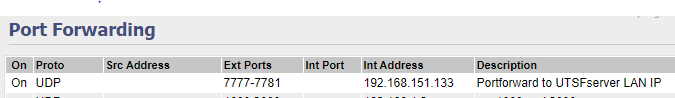
**UT99 SF SERVER GUIDE and SECURITY UPDATE PATCH v1**

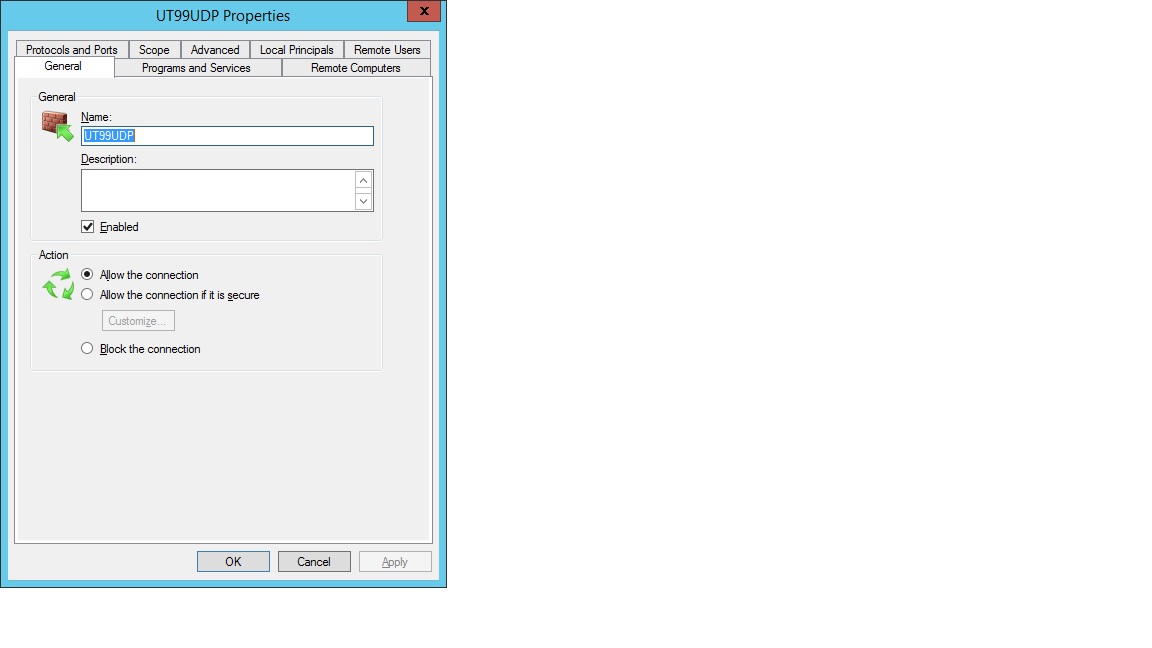
1. **Port Forwarding**

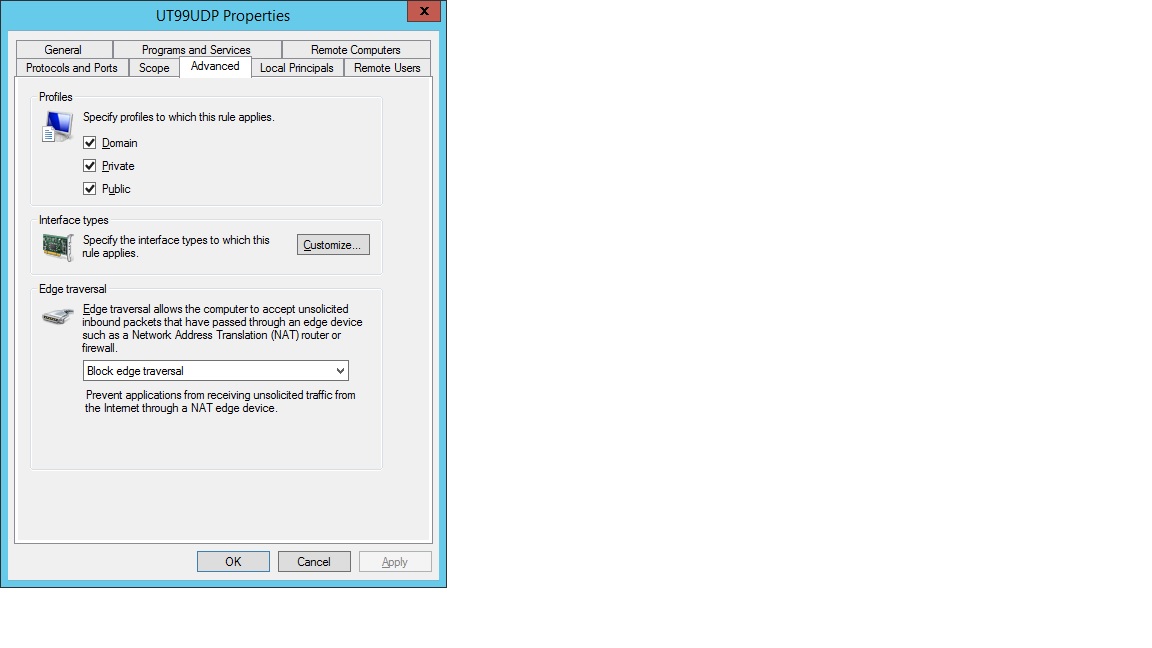
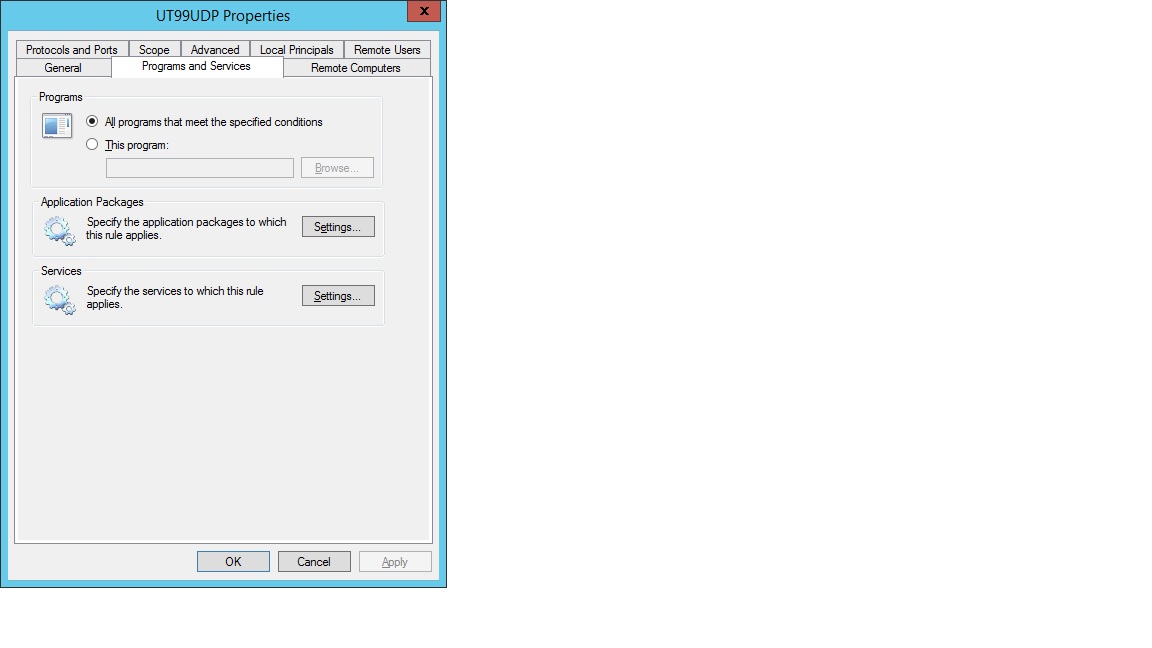
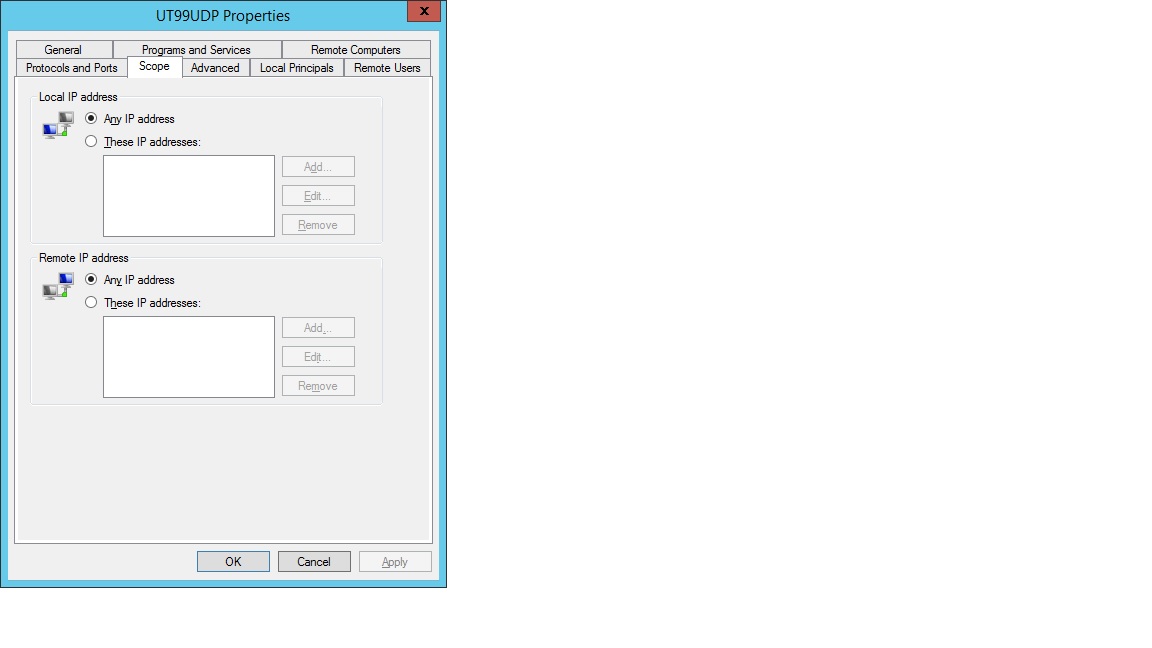
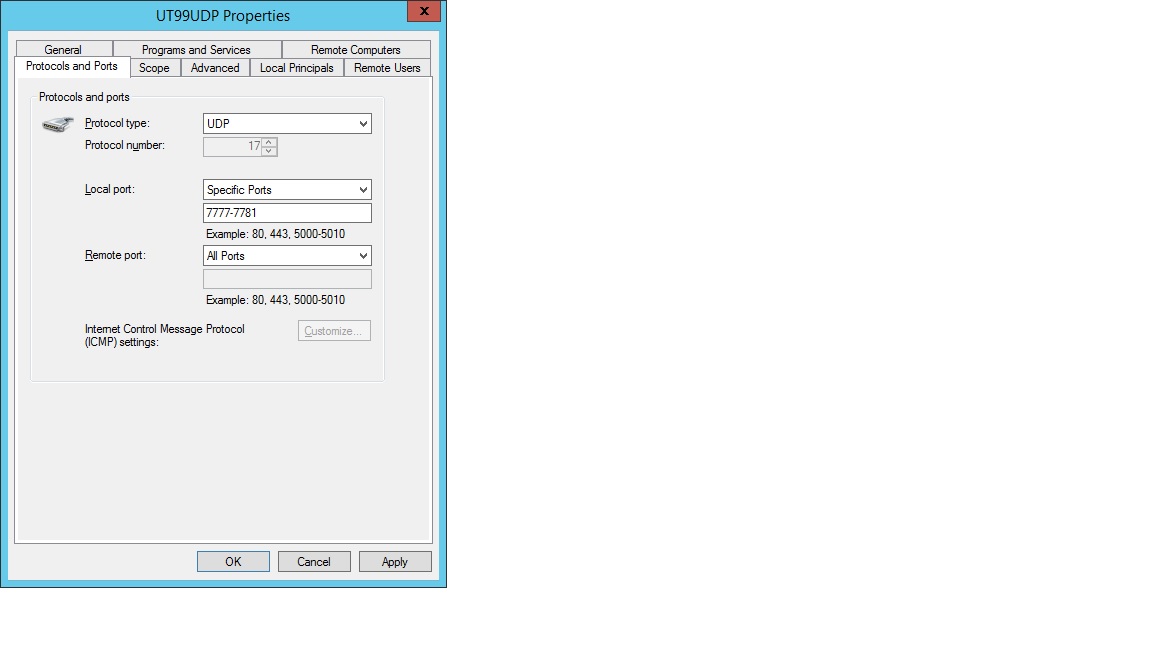
If your game server is behind NAT, Port Forward UDP ports 7777-7781 FROM your internet router TO local-area network (LAN) IP address of your UT99 SF server. Default UT server port is 7777. if you change that, apply port forwarding to your new corresponding port + 4 next UDP ports above it.



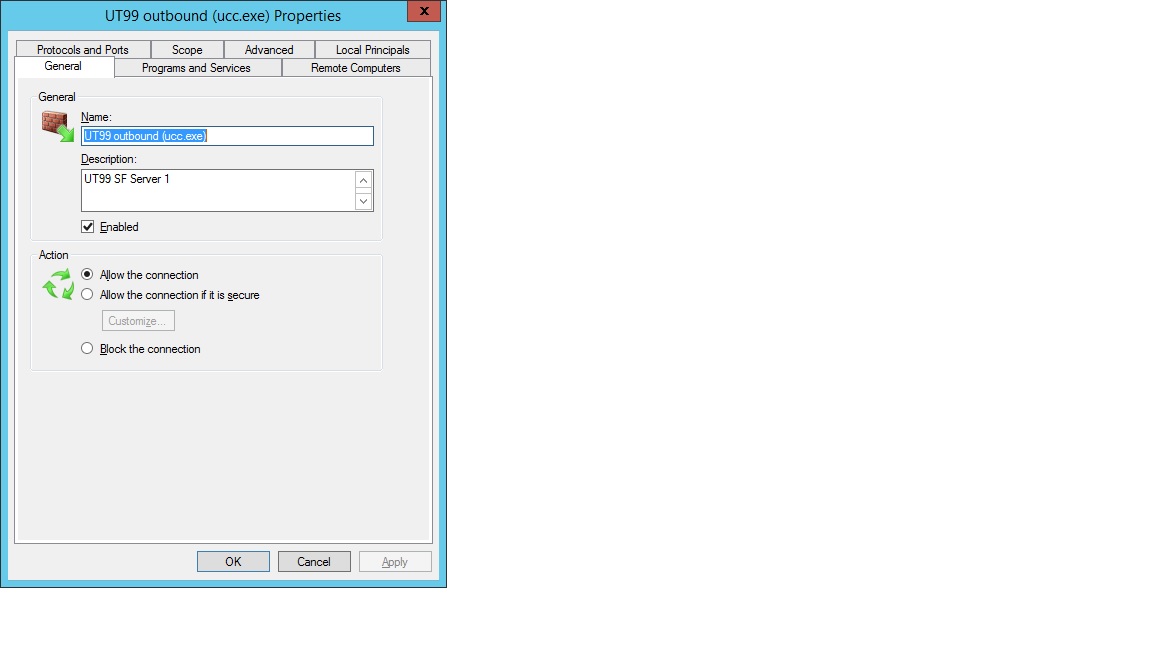
1. **Firewall**

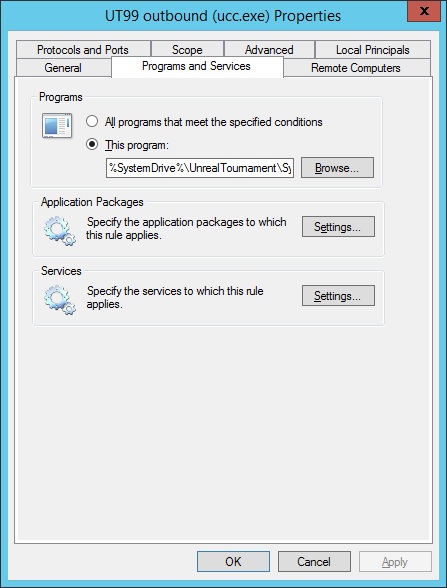
Allow inbound UDP connections in Firewall of your UT99 SF server for these same ports mentioned above (no matter if NAT is used or your server is directly connected to internet and has public IP address). Following example pics are screenshots from Windows Server 2012 R2.

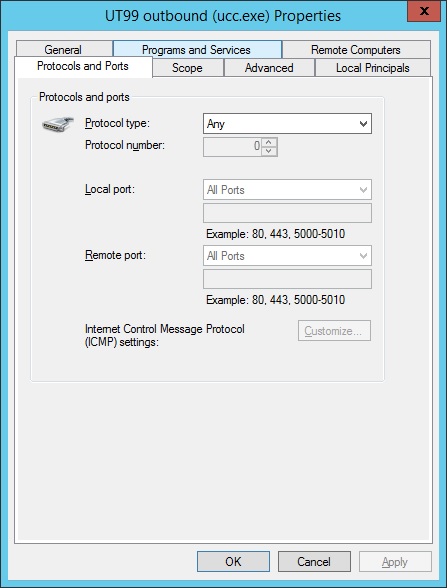


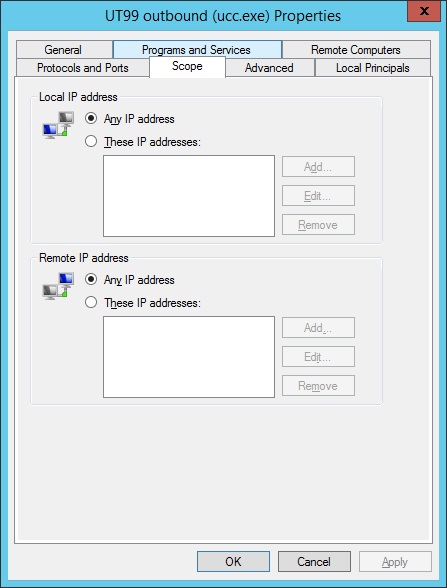


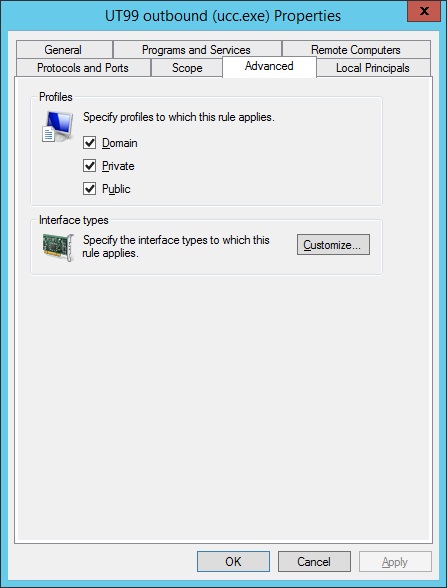
* 1. Allow all outbound connections by ucc.exe (located in UnrealTournament\System).





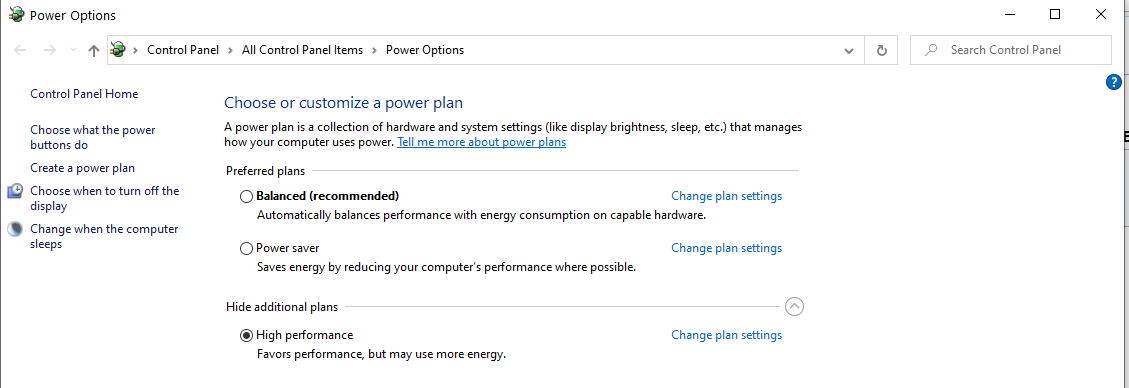






1. **Server Power profile settings**

Disable Intel CPU SpeedStep (EIST) functionality or corresponding AMD AMD Cool'n'Quiet/PowerNow!/ Optimized Power Management from BIOS if you can.  
  
Set your Power profile to “High performance” in Additional power settings of Windows. It will disable CPU dynamic frequency scaling (CPU throttling), otherwise UT game engine messes up as CPU speed/frequency is not stable and keeps changing up and down.



My server start-up batch tries to set the Power profile to “High performance” too. It may not work in all systems. I think it works at least in Windows Server 2012 R2 and Windows 10 Pro (x64). Check the batch file for more details.  
 **4. Unzip server update package**  
Unzip package and replace ALL files (including your ini-files) located in UnrealTournament\System, UnrealTournament\Web, UnrealTournament\Help  
  
Modify StrikeForce-Server.ini (change ServerName, AdminPassword, GamePassword and RedirectToURL if you have web server for redirecting additional maps etc files).  
  
Package includes:  
UTPG4.51b  
ServerCrashFix v1.1  
Unreliable-adv security patch  
SF184 Add-on 2 - bug fixes etc for SF 1.84  
  
Copies of these are in zip folder too.  
  
Packages are for Window servers only. Do not install in linux server or any game client computer.  
 **5. Running UT99 SF game server**  
UT engine is 20 years old… same as with CPU throttling, if you want to have good and stable online gaming experience for players in your server, it’s not good idea to run UT server engine with multiple CPU cores. You can use Affinity settings to force ucc.exe to run by one core only. Core 0 seems to be the busiest with OS related task. Core 1 or core 3 seem to be good choice for this.  
  
You can change the core to one you like by modifying Start\_SFTDM-server-7777.bat file. This setting is defined there:  
  
start "SF184 SERVER" /affinity 2 /wait /realtime ucc.exe server SFTDM-T\_MiddleEast\_182.unr?game=SF184Addon2.SFTeamDM?mutator=SF184Addon2.SFMapVote -log=SFserverlog.log -INI=StrikeForce-Server.ini -USERINI=SFUser.ini -port=7777  
  
/affinity 1 => core 0, /affinity 2 => core 1, /affinity 4 => core 2, /affinity 8 => core 3  
  
Please note the Gametype change with SF184 Add-on 2, you CANNOT use older SFMapVote mutators with this update. No worries, this add-on includes new improved version of Mapvote 😊  
  
Happy Fragging,  
  
Jori aka “Jovi” Virolainen  
[jovi@iki.f](mailto:jovi@iki.fi)i