

MARKS: 20%	
TOPOLOGY	
<ul style="list-style-type: none"><li>Maximum 6 routers</li><li>Maximum 7 switches</li><li>Bartfort Domain router connects to 2 switches (2 LANs)</li><li>Duke Bartfort (LAN) has a Web Server</li><li>Redgrave (LAN) has a DNS Server</li><li>Atlee (LAN) has an Email Server</li><li>Capital (LAN) has two Web, one Email and one DHCP Servers</li><li>Every LAN has a main named PC, and 2 additional end devices (PCs)</li><li>Elven Island router is secluded and not connected to other routers</li><li>Elven LAN has a fixed network (59.68.96.32/27)</li><li>Elven Island router placed to the left of Bartfort Domain router</li><li>Elven LAN has at least 2 end devices (PCs)</li><li>Topology has proper labels and annotations</li></ul>	
NETWORKS [VLSM Table]	
<ul style="list-style-type: none"><li>Maximum Network: 255.255.224(11100000) 0/19</li><li>Capital LAN [2789 + 1 + 2]: &lt;network&gt;/20</li><li>Redgrave LAN [1000 + 1 + 2]: &lt;network&gt;/22</li><li>Roseblade LAN [411 + 1 + 2]: &lt;network&gt;/23</li><li>Atlee LAN [411 + 1 + 2]: &lt;network&gt;/23</li><li>Baron Bartfort LAN [120 + 1 + 2]: &lt;network&gt;/25</li><li>Duke Bartfort LAN [50 + 1 + 2]: &lt;network&gt;/26</li><li>Elven LAN [20 + 1 + 2]: 59.68.96.32/27</li><li>WAN [2 + 2]: &lt;network&gt;/30</li></ul>	

MARKS: 30%	
SERVERS (Except Elven Island)	
<ul style="list-style-type: none"><li>Access a URL from any PC Web Browser: Should show a message accordingly<ul style="list-style-type: none"><li>'capital.holfort.kingdom' -&gt; 'Welcome to the Capital of the Kingdom of Holfort' Family'</li><li>'royal.holfort.kingdom' -&gt; 'You are now in the presence of the Holfort Royal Family'</li><li>'duke.bartfort.kingdom' -&gt; 'Welcome to the Domain of Duke Bartfort'</li></ul></li><li>Send an email from Atlee to Capital or vice versa</li><li>Email can be both sent and received</li><li>Email servers should send DNS query to Redgrave LAN to get email server IP (simulate)</li></ul>	
ROUTING	
<ul style="list-style-type: none"><li>Atlee-Bartfort (static)<ul style="list-style-type: none"><li>Disable Capital-Bartfort and Capital-Redgrave routes</li><li>Ping Capital to Baron Bartfort: Should Fail</li><li>Ping Capital to Duke Bartfort: Should Fail</li><li>Ping Atlee to Baron Bartfort: Should Fail</li><li>Ping Atlee to Duke Bartfort: Should Succeed</li></ul></li><li>Redgrave-Bartfort (static)<ul style="list-style-type: none"><li>Ping Redgrave to Bartfort or vice versa: Should Succeed</li><li>Disable Redgrave-Bartfort or Capital-Bartfort route and ping from the other: Should Succeed</li></ul></li><li>All other routes are dynamic</li><li>No default routes</li></ul>	
LOGICAL ADDRESS [Address Table]	
<ul style="list-style-type: none"><li>All servers have static IP</li><li>Capital has a DHCP Server<ul style="list-style-type: none"><li>Main PC is static, 4 Servers are static, 20 extra PCs are static, Default gateway takes 1 IP</li><li>Exclude at least 26 IP addresses</li></ul></li><li>Other LANs use dynamic IP assignment (can use a separate server or a router)</li><li>Elven LAN uses dynamic IP from the router</li><li>Exclude some IP for Servers (where applicable) and Default Gateways</li><li>Add a new end device and check for dynamic IP assigning</li><li>All IP within specified networks</li></ul>	

