AtlasIED Application Note

Configuring HTTPS Trust for GCK System Management Center (SMC) in Internet Explorer

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Background

Starting with Service Pack 3 (SP3) of GLOBALCOM/CONTROLKOM (GCK), the web pages are served up via encrypted secure sockets, i.e., the HTTPS protocol. The encryption process requires a certificate for encoding/decoding. Public/Internet websites can use certificates that are verified by "trusted certificate authorities" that can be contacted over the Internet. This process happens automatically when browsing the Worldwide Web, but cannot happen on a closed/private network situation. Therefore, GCK SMC uses what is called "self certification". The website provides the certificate needed for encryption, but it is up to the user to manually verify that this is allowable.

How this is done and how the browser behaves varies by version of Windows, version of Internet Explorer and the logged in user's security credentials. This application note covers the most common cases. The browser behavior can also be different depending on whether you are attempting to go directly to https: or to http: which automatically redirects to the https protocol/site.

Initial Security Warning

When trying to access the GCK SMC from a client/remote system, one might get the type of warning as shown below in Figure 1. This is normal. This can be made to go away with the procedures that are listed later in this application note, but it will *come back* if the IP address of the GCK controller (and therefore website) is changed. In this case, one will need to repeat the procedures listed later.

If one does not see the second option: "Continue to this website (not recommended)", then one needs to do one of two things to make this option appear:

- Directly type in the secure protocol path: https://<ip address> (if one had used http or no protocol initially in Internet Explorer)
- Re-launch in administrator mode Internet Explorer by right-clicking on its icon and selecting "Run as Administrator"

One may click on the "Continue..." option and get access to the secure web page. In most versions of Internet Explorers, there will continue to be a certificate warning shown at the top, but everything will function normally on the web pages.



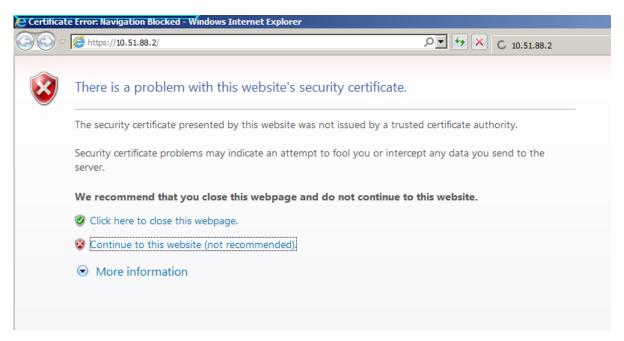


Figure 1: Trusted Website Warning

Making GCK SMC a Trusted Site

One can opt to always just click on the "Continue..." option when accessing SMC. But, to get this warning/step to go away, one needs to make it into a "Trusted Site". How this is done varies by version of Internet Explorer, so two approaches are description below.

Approach 1: Add to Trusted Site List

In recent versions of IE (e.g., the one that comes with Windows 10), it is sufficient to simply add to the Trusted Site list in Internet Options. This is done as follows:

- 1. Access the site with the "Continue..." option indicated in Figure 1
- 2. Select the Settings gear, Internet Options (see Figure 2)

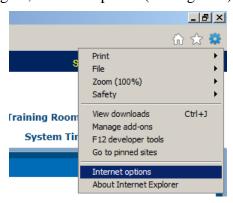


Figure 2: Internet Options on Settings Menu

3. On the Internet Options pop-up, select the **Security** tab page.

Internet Options General Security Privacy Content Connections Programs Advanced Select a zone to view or change security settings. Restricted **Trusted sites** Sites This zone contains websites that you trust not to damage your computer or your files. Security level for this zone Allowed levels for this zone: All Medium - Prompts before downloading potentially unsafe - Unsigned ActiveX controls will not be downloaded ☐ Enable Protected Mode (requires restarting Internet Explorer) Custom level... Reset all zones to default level Cancel

4. Click on the **Trusted Sites** icon (green checkmark) under "Select a zone..."

Figure 3: Internet Options Security Tab Page

5. Then, click on the **Sites** button to bring up the Trusted sites pop-up box as shown below in Figure 4. At this point, the website for GCK should appear in the "**Add this website to the zone**" edit box.

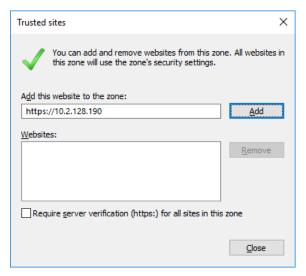


Figure 4: Trusted Sites Pop-up

- 6. Simply click on the **Add** button, to add it to the **Websites** list. Uncheck the "**Require** server verification..." checkbox if checked, and then the **Close** button.
- 7. Click **OK** to also close out the Internet Options settings pop-up.

Now, run a test by closing out Internet Explorer, re-launching it and navigating to the GCK SMC website. If it opens now without "complaint" you are done. If it still is prompting with the trusted website warning as shown in Figure 1, then you will need to go to Option 2 below.

Approach 2: Import GCK SMC Certificate

It has been found that Option 1 doesn't work on older versions of Internet Explorer, such as version 9. For cases where it doesn't work, there is a way to get the certificate from GCK and manually import (install) it. The steps for doing this are detailed below.

1. Left-click on the certificate error warning that appears next to the path at the top of Internet Explorer as shown in Figure 5. This brings up the **Untrusted Certificate** pop-up with the option to **View certificates**.



Figure 5: Untrusted Certificate Pop-up

2. Select the **View certificates** option. This brings up the Certificate pop-up as shown in Figure 6.

- 3. Select the **Details** tab page.
- 4. Select the **Copy to file...** button at lower right. This brings up the **Certificate Export Wizard** as shown in Figure 7.

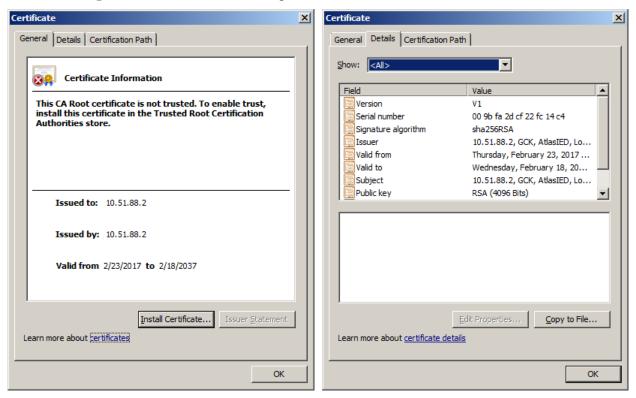


Figure 6: Certificate Information Pop-up

- 5. Click through the wizard's **Next** buttons, accepting all defaults.
- 6. On the third wizard page, one needs to press **Browse** to select a file to save the certificate in, e.g., on the Windows desktop, "MySystem Certificate".
- 7. Press the **Finish** button on the last step.

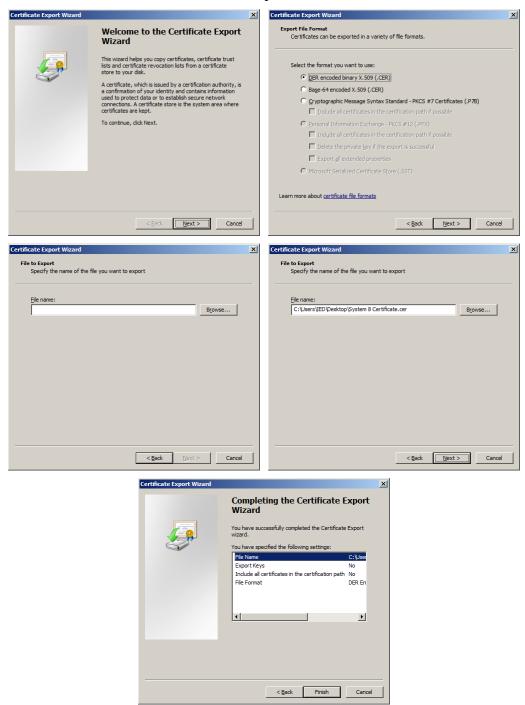


Figure 7: Certificate Export Wizard Windows

- 8. After a brief delay, a message box should appear indicating that the export was successful. Click OK on this message box to close it, and exit any other pop-up boxes still open.
- 9. Now it is time to import this file. Start by selecting the Settings gear and **Internet Options** from the menu (as shown back in Figure 2). Then select the **Content** tab page as shown below in Figure 8.



Figure 8: Internet Options, Content Tab Page

10. Select the **Certificates** button to bring up the Certificates pop-up as shown in Figure 9.

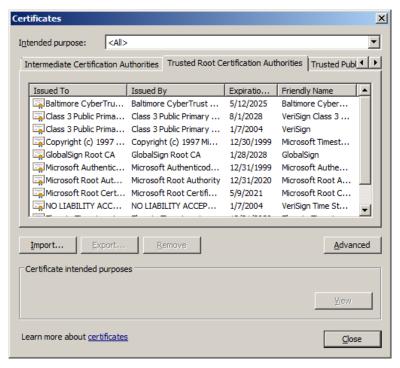


Figure 9: Certificates Pop-up

11. Select the **Trusted Root Certification Authorities** tab and then the **Import** button to bring up the **Certificate Import Wizard** as shown below in Figure 10.



Figure 10: Certificate Import Wizard

- 12. Click through the wizard's **Next** buttons, accepting all defaults. On the second step, one must use the **Browse** button to locate the certificate file saved previously.
- 13. After one gets to the final wizard screen and clicks on the **Finish** button, the computer will work for a while before presenting the "dire warning" shown in the last screenshot in Figure 11 below. Click on the **Yes** button on this window.

Note: On some computers, the import process can take long enough, that the Certificate Import Windows may be marked as "(Not Responding)". Just be patient and wait for the process to end.

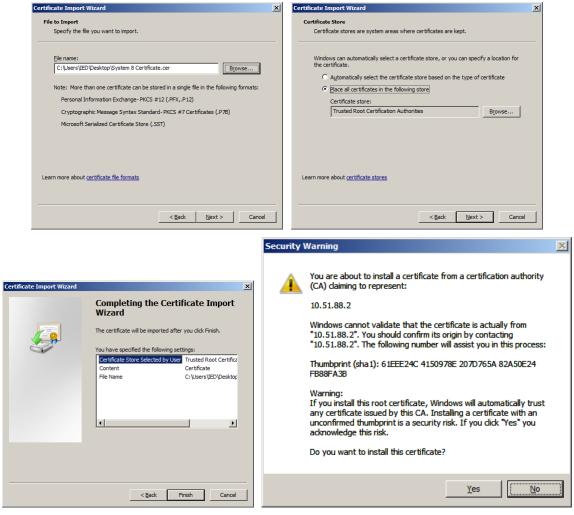


Figure 11: Certificate Import Wizard Pages and Dire Warning

- 14. Close out any open Certificates and Internet Options windows.
- 15. Close Internet Explorer and re-launch for the GCK SMC website.

Now, the GCK SMC website should open without any prompts or warnings about certificates.