Activity 8: Part 1

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CST-407

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Operating Systems Security

1.Review the associated resources located in the Topic Materials.

2.Write a 750- to 1,000-word summary that highlights the following concepts:

a.Describe what the terms mean in the context of an operating system: (a) enforced resource sharing, (b) guaranteed fair service, and (c) memory protection.

b.Describe the following developments in memory management. Explain the rationale behind each idea and why the following idea was developed: (a) Fence, (b) boundary registers, (c) tagged memory, (d) segmentation, and (e) paging.

c.Explain the following operating system features and how they can enhance security: (a) layered privilege processes, (b) virtualization, and (c) sandbox.

d.Explain what a rootkit is and give examples of how one might remain invisible to a user of the infected system.

e.Explain how an anti-rootkit tool is used and what it does.