

Signatures Detector

You need to develop simple signature detector application which contains of the following two components (applications):

- Scanner: core component, implemented as a separate server process.
- GUI application.

Scanner description

Scanner component must be able to:

- Scan file by path;
- Scan array of bytes.

Define and implement appropriate methods in the scanner interface.

Use the following malware detection algorithm: if scanned file contains any of predefined byte sequences, it is considered infected. The sequences are stored in the regular text file separated by newlines, in the following format:

HexString.{GUID}

Examples:

01ABEDFF55.{ab306a70-0fd2-4b4b-84fe-f9ebd899d90f}

EE21DEAD827739ACCD028FFC.{5c34b10f-3f6d-4bbb-b9ec-2faa1ee07660}

If appropriate sequence is found, scanner must return its GUID. Use file mapping to increase scanning performance.

GUI application description

- Application must be able to use scanner component to recursively scan specific folder.
- Scanning progress must be displayed in the progress bar control.
- To improve speed, scanning must be performed in the separated threads (thread pool) in parallel.

Notes

- You are free to refer to any documentation/internet etc.