

CLAIMS

1. A computer implemented method for maintaining data processing system security, the method comprising:
receiving from a metadata storage unit, by one or more computer processors, metadata associated with at least one part of a data file;
generating, by the one or more computer processors, a priority for the at least one part of the data file according to the metadata; and
conducting, by the one or more computer processors, a scan of the data file according to the priority;
wherein the metadata comprises one or more virus indicators.
2. The computer implemented method according to claim 1, wherein the metadata is associated with a checksum continuously calculated in parallel as the data file streams into a data store.
3. The computer implemented method according to either of the preceding claims, further comprising:
updating, by the one or more computer processors, the metadata of the data file according to the scan;
and
providing, by the one or more computer processors, the data file for further processing.
4. The computer implemented method according to claim 1, wherein the priority is generated according to a correlation of data file metadata.
5. The computer implemented method according to claim 1, further comprising presenting, by the one or more computer processors, the data file to a cleansing routine.
6. The computer implemented method according to any of the preceding claims, further comprising:
matching, by the one or more computer processors, a checksum for a part of the data file with a checksum in the metadata storage unit; and
triggering, by the one or more computer processors, a data cleansing routine in response to the matching.
7. The computer implemented method according to any of the preceding claims, further comprising updating, by the one or more computer processors, checksum metadata associated with a part of the data file.
8. A computer implemented method for maintaining system security, the method comprising:
receiving, by one or more computer processors, an updated virus definition;
obtaining, by the one or more computer processors, metadata associated with at least one data file from a metadata storage unit;

generating, by the one or more computer processors, a priority for the at least one data file according to the metadata and updated virus definition;

selecting, by the one or more computer processors, a data file according to the priority;

conducting, by the one or more computer processors, a scan of the data file;

updating, by the one or more computer processors, the metadata of the data file according to the scan;

and

providing, by the one or more computer processors, the data file for further processing.

9. The computer implemented method according to claim 8, wherein the metadata is associated with a checksum continuously calculated in parallel as the data file streams into a data store.

10. A computer implemented method for maintaining system security, the method comprising:

obtaining, by one or more computer processors, metadata associated with at least one data file from a metadata storage unit;

generating, by the one or more computer processors, a priority for the at least one data file according to the metadata;

selecting, by the one or more computer processors, a data file according to the priority;

conducting, by the one or more computer processors, a scan of the data file;

determining, by the one or more computer processors, a common vulnerabilities and exposures score for the data file;

updating, by the one or more computer processors, the metadata of the data file according to the scan;

and

providing, by the one or more computer processors, the score to a system user for evaluation.

11. The computer implemented method according to claim 10, wherein the metadata is associated with a checksum continuously calculated in parallel as the data file streams into a data store.

12. A computer system for maintaining system security, the computer system comprising:

one or more computer processors;

one or more computer readable storage devices; and

stored program instructions on the one or more computer readable storage devices for execution by the one or more computer processors, the stored program instructions comprising:

program instructions to receive from a metadata storage unit metadata associated with at least one data file;

file;

program instructions to generate a priority for the at least one data file according to the metadata; and

program instructions to conduct a scan of the data file according to the priority;
wherein the metadata comprises one or more virus indicators.

13. The computer system according to claim 12, wherein the metadata is associated with a checksum continuously calculated in parallel as the data file streams into a data store.
14. The computer system according to either of claims 12 or 13, further comprising:
program instructions to update the metadata of the data file according to the scan; and
program instructions to provide the data file for further processing.
15. The computer system according to any of claims 12 to 14, wherein the priority is generated according to a correlation of data file metadata.
16. The computer system according to any of claims 12 to 15, further comprising program instructions to present the data file to a cleansing routine.
17. The computer system according to any of claims 12 to 16, further comprising:
program instructions to match, by the one or more computer processors, a checksum for a part of the data file with a checksum in the metadata storage unit; and
program instructions to trigger a data cleansing routine in response to matching the checksum.
18. The computer system according to any of claims 12 to 17, further comprising program instructions to update checksum metadata associated with a part of the data file.
19. A computer program product for maintaining system security, the computer program product comprising:
a computer readable storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing a method according to any of claims 1 to 11.
20. A computer program stored on a computer readable medium and loadable into the internal memory of a digital computer, comprising software code portions, when said program is run on a computer, for performing the method of any of claims 1 to 11.