



Memory Acquisition Patterns

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Pattern Catalog Idea

General platform and product independent, reusable solutions to commonly occurring memory acquisition problems applicable in a specific context.

[Windows specific dump configuration and generation](#) (Special Topics slides)

Pattern Categories

- Structural Space Patterns

various memory dump and snapshot types

- Acquisition Strategy Patterns

various strategies to acquire memory data

Structural Space Patterns

- General
- Volatile
- Persistent

General

- ◎ State Summary Dump

minidump / [ProcDump](#)

.dump / .dumpcab in WinDbg

[LiveKD](#)

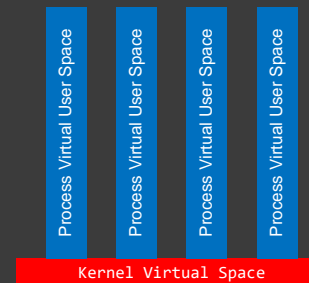
- ◎ Region Memory Dump

.writemem in WinDbg

Volatile

- ⦿ Process Memory Dump
- ⦿ Kernel Memory Dump
- ⦿ Physical Memory Dump
- ⦿ Hyper Memory Dump
- ⦿ Fibre Bundle Dump

Hyperdump memory analysis pattern



Persistent

- ⦿ File Memory Dump
- ⦿ Storage Memory Dump

Acquisition Strategy Patterns

- External Dump

- Self Dump

[Self-Dump](#)

- Conditional Dump

[Evental Dumps](#)

- Dump Sequence

[Step Dumps](#)

- Transactional Dump

addresses [Inconsistent Dump](#)
consistency options in LiveKd