2025-Jun-10-Reanalysis-01 (Gear-First)

```
# -*- coding: utf-8 -*-
import os, zipfile, hashlib, plistlib, io, re, json, mimetypes, sys, textwrap
from datetime import datetime, timezone
from pathlib import Path
import pandas as pd
# IMPORTANT: All paths are under /mnt/data (sandboxed)
BASE = Path("/mnt/data").resolve()
WORK = BASE / "_work_2025-06-10"
EXTRACT = WORK / "unzipped"
OUT = WORK / "out"
for p in [WORK, EXTRACT, OUT]:
  p.mkdir(parents=True, exist_ok=True)
# Helper functions
def sha256_of_path(path: Path, chunk=1024*1024):
  h = hashlib.sha256()
  with open(path, "rb") as f:
    while True:
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b = f.read(chunk)
       if not b: break
       h.update(b)
  return h.hexdigest()
def safe_mime_guess(p: Path):
  # crude guess; do not import external libs
  m, _ = mimetypes.guess_type(str(p))
  return m or "application/octet-stream"
def list_uploaded_files():
  # Only consider the files the user said they uploaded (and developer tool listed)
  candidates = [
     "log-bb-2025-06-10-stats.plist",
     "README_victim_map.zip",
     "identifiers_dedup.zip",
     "bug_type_298_2025-06-10_combined.zip",
     "H.zip",
     "Tajima.zip",
     "victim_report_template.zip",
     "victim_report_template (2).zip",
     "REPORT_extract_2025-06-10 2.zip",
     "REPORT_extract_2025-06-10 2 (2).zip",
  ]
  files = []
```

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for name in candidates:
     path = BASE / name
     if path.exists():
        files.append(path)
  return files
def unzip_all(zp: Path, dest_dir: Path):
  """Extract zip with folder prefix to avoid collisions."""
  prefix_dir = dest_dir / zp.stem
  prefix_dir.mkdir(parents=True, exist_ok=True)
  extracted = []
  try:
     with zipfile.ZipFile(zp, 'r') as zf:
        for info in zf.infolist():
          # Skip directories
          if info.is_dir():
             continue
          # Sanitize inner path
          inner_rel = Path(info.filename)
          safe_rel = Path(*[p for p in inner_rel.parts if p not in ("..", "/", "\text{YY"})])
          target = prefix_dir / safe_rel
          target.parent.mkdir(parents=True, exist_ok=True)
          with zf.open(info, 'r') as src, open(target, 'wb') as dst:
             dst.write(src.read())
           extracted.append(target)
```

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except zipfile.BadZipFile:
     # not a valid zip; ignore
     pass
  return extracted
def try_parse_plist(path: Path):
  try:
     with open(path, 'rb') as f:
       data = plistlib.load(f)
     return data
  except Exception as e:
     return {"__error__": str(e)}
def read_text_best_effort(p: Path, max_bytes=1024*1024*4):
  try:
     with open(p, "rb") as f:
       raw = f.read(max_bytes)
     # try several encodings
     for enc in ("utf-8", "utf-8-sig", "latin-1", "utf-16", "utf-16le", "utf-16be"):
       try:
          return raw.decode(enc, errors="ignore")
       except Exception:
          continue
  except Exception:
     pass
```

```
return ""
def find_keywords_in_file(path: Path, keywords):
  text = read_text_best_effort(path)
  hits = []
  if not text:
     return hits
  for kw in keywords:
     # case-insensitive search; collect context lines
     pattern = re.compile(re.escape(kw), re.IGNORECASE)
     for m in pattern.finditer(text):
       # extract surrounding line or ~120 chars context
       start = max(0, m.start() - 80)
       end = min(len(text), m.end() + 80)
       snippet = text[start:end].replace("\forall n", " ")
       hits.append((kw, snippet))
  return hits
def parse_ips_quick(text):
  ,,,,,,,
  Heuristic parse for .ips content; extract JSON-like lines or keys.
  Returns dict list with common fields when observed.
  events = []
  # First, try to find JSON blobs (lines with braces). Fallback to regex for key-value.
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# Extract 'bug_type', 'timestamp', 'incident_id', 'os_version', 'procname'
# Many .ips are plist-like; we attempt regex.
bug_type = None
ts = None
incident_id = None
os_version = None
procname = None
# Simple regexes
r_bug = re.compile(r'"?bug_type"?\footnote{s*"?([0-9A-Za-z]+)"?')
r\_ts = re.compile(r'''?timestamp''? \\ \forall s*[:=] \\ \forall s*''([^"]+)''')
r_{inc} = re.compile(r'''?incident_id''?Ys^*[:=]Ys^*''([0-9A-Fa-fY-]+)''')
r_{osv} = re.compile(r'''?os_version''? +s^*[:=] +s^*''([^"]+)''')
r_proc = re.compile(r'''?procname"?Ys*[:=]Ys*"([^"]+)"")
r\_parent = re.compile(r'''?parent\_process"? Ys*[:=] Ys*"([^"]+)"')
d = \{\}
m = r_bug.search(text);
if m: d["bug_type"] = m.group(1)
m = r_ts.search(text);
if m: d["timestamp"] = m.group(1)
m = r_{inc.search(text)};
if m: d["incident_id"] = m.group(1)
m = r_osv.search(text);
if m: d["os version"] = m.group(1)
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m = r_proc.search(text);
  if m: d["procname"] = m.group(1)
  m = r_parent.search(text);
  if m: d["parent_process"] = m.group(1)
  # If at least one key found, return as single record
  if d:
    events.append(d)
  return events
# -----
# Inventory & Hashing (top-level)
# -----
uploaded = list_uploaded_files()
manifest_rows = []
for p in uploaded:
  try:
    h = sha256\_of\_path(p)
    manifest_rows.append({
       "level": "top",
       "parent": "",
       "path": str(p),
       "name": p.name,
       "size_bytes": p.stat().st_size,
       "sha256": h,
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"mime_guess": safe_mime_guess(p),
    })
  except Exception as e:
    manifest_rows.append({
       "level": "top",
       "parent": "",
       "path": str(p),
       "name": p.name,
       "size_bytes": None,
       "sha256": f"__ERROR__:{e}",
       "mime_guess": "unknown",
    })
df_manifest_top = pd.DataFrame(manifest_rows).sort_values("name")
top_csv = OUT / "manifest_top_files.csv"
df_manifest_top.to_csv(top_csv, index=False)
# -----
# Extract zips & Inventory inner files
# -----
inner_rows = []
for p in uploaded:
  if p.suffix.lower() == ".zip":
    extracted = unzip_all(p, EXTRACT)
    for q in extracted:
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try:
          hq = sha256 \text{ of } path(q)
       except Exception as e:
          hq = f''_ERROR_:{e}''
       inner_rows.append({
          "level": "inner",
          "parent": p.name,
          "inner_relpath": str(q.relative_to(EXTRACT / p.stem)),
          "abs_path": str(q),
          "name": q.name,
          "size_bytes": q.stat().st_size if q.exists() else None,
          "sha256": hq,
          "mime_guess": safe_mime_guess(q),
       })
df_inner = pd.DataFrame(inner_rows)
if not df_inner.empty:
  df_inner = df_inner.sort_values(["parent","inner_relpath"])
inner_csv = OUT / "manifest_inner_files.csv"
df_inner.to_csv(inner_csv, index=False)
# Dedup clusters by sha256 (top + inner)
df_all = pd.concat([df_manifest_top.rename(columns={"path":"abs_path"}), df_inner],
ignore_index=True, sort=False)
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dup_groups = df_all.groupby("sha256").size().reset_index(name="count").sort_values("count",
ascending=False)
dup_csv = OUT / "dedup_clusters.csv"
dup groups.to csv(dup csv, index=False)
# -----
# Parse plist if present
# -----
plist_path = BASE / "log-bb-2025-06-10-stats.plist"
plist_rows = []
if plist_path.exists():
  parsed = try_parse_plist(plist_path)
  def flatten(prefix, obj):
    if isinstance(obj, dict):
       for k,v in obj.items():
         yield from flatten(f"{prefix}.{k}" if prefix else str(k), v)
    elif isinstance(obj, list):
       for i, v in enumerate(obj):
         yield from flatten(f"{prefix}[{i}]", v)
    else:
       yield prefix, obj
  for k,v in flatten("", parsed):
    plist_rows.append({"key": k, "value": v})
df_plist = pd.DataFrame(plist_rows)
plist_csv = OUT / "plist_kv_flat.csv"
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df_plist.to_csv(plist_csv, index=False)
# -----
# Keyword scanning (MDM/Pegasus/Viettel/Support)
# -----
# Derived from user's fixed lists + common indicators
MDM_KEYWORDS = [
  "InstallConfigurationProfile", "RemoveConfigurationProfile", "mobileconfig",
  "MCProfile", "MCProfileTrustLevel", "MCXPreferences",
  "mdmd", "managedconfigurationd", "profileinstalld", "installcoordinationd", "mcinstall",
  "BackgroundShortcutRunner",
]
APPLE_FRAMEWORK_KEYS = [
  "triald", "SiriSearchFeedback", "searchd", "suggestd", "ScreenTimeAgent",
  "assetsd", "JetsamEvent", "Stackshot", "usageClientId", "signpost_reporter",
  "power session", "duetexpertd", "sharingd",
]
PEGASUS_KEYS = [
  "Pegasus", "NSO", "BlastDoor", "FORCEDENTRY", "Kismet",
]
VIETTEL_KEYS = [
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"com.vnp.myviettel", "myviettel", "Viettel", "viettel.vn", "GlobalSign RSA OV SSL CA 2018",
"*.viettel.vn"
]
APPLE_SUPPORT_KEYS = [
  "Apple Support", "Advisor", "Case ID", "support.apple.com", "chat adviser", "Chat Adviser"
]
ALL_KEYS = MDM_KEYWORDS + APPLE_FRAMEWORK_KEYS + PEGASUS_KEYS +
VIETTEL_KEYS + APPLE_SUPPORT_KEYS
# We'll scan only a subset of inner files that are text-like or .ips/.log/.txt/.json/.csv/.plist/.der
TEXT EXTS =
{".txt",".log",".ips",".json",".csv",".plist",".xml",".html",".md",".rtf",".strings",".ca",".session",".der"
,".cer",".pem"}
keyword_rows = []
scan_targets = []
# Prioritize inner files if available; otherwise, scan top files
if not df_inner.empty:
  scan_targets = [Path(p) for p in df_inner["abs_path"].tolist() if Path(p).exists()]
else:
  scan_targets = uploaded
# Restrict to plausible text-ish files
targets filtered = []
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```
for p in scan_targets:
  ext = p.suffix.lower()
  if ext in TEXT_EXTS:
     targets_filtered.append(p)
  else:
     # small heuristic: treat small unknown files as text if < 2MB
     try:
       if p.stat().st_size \leq 2*1024*1024:
          targets_filtered.append(p)
     except Exception:
       pass
# Scan for keywords
for p in targets_filtered:
  try:
     hits = find_keywords_in_file(p, ALL_KEYS)
     for kw, snippet in hits:
       keyword_rows.append({
          "file": str(p),
          "keyword": kw,
          "snippet": snippet[:200],
       })
  except Exception as e:
     keyword_rows.append({
       "file": str(p), "keyword": "__ERROR__", "snippet": str(e)
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})
```

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df_hits = pd.DataFrame(keyword_rows)
hits_csv = OUT / "keyword_hits.csv"
df_hits.to_csv(hits_csv, index=False)
# Summary counts by keyword
df_kw_summary = pd.DataFrame()
if not df_hits.empty:
  df_kw_summary =
df_hits.groupby("keyword").size().reset_index(name="hit_count").sort_values("hit_count",
ascending=False)
kw_summary_csv = OUT / "keyword_summary.csv"
df_kw_summary.to_csv(kw_summary_csv, index=False)
# Focus parse for bug_type_298 events on 2025-06-10
# -----
ips_rows = []
if not df_inner.empty:
  # Filter likely ips files from the bug_type zip folder or generally with '298' in name
  for _, row in df_inner.iterrows():
    ap = Path(row.get("abs_path", ""))
    if not ap.exists():
       continue
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name_l = ap.name.lower()
    if ".ips" in name_I or name_I.endswith(".log") or "bug_type_298" in name_I:
       text = read_text_best_effort(ap)
       if not text:
         continue
       parsed = parse_ips_quick(text)
       for d in parsed:
         d["source_file"] = str(ap)
         ips_rows.append(d)
df_ips = pd.DataFrame(ips_rows)
ips_csv = OUT / "bug_type_298_parsed.csv"
df_ips.to_csv(ips_csv, index=False)
# -----
# MyViettel presence check (installation traces)
# ------
viettel_rows = []
for p in targets_filtered:
  text = read_text_best_effort(p, max_bytes=1024*1024*2)
  if not text:
    continue
  if re.search(r"com\u00e4.vnp\u00e4.myviettel", text, re.IGNORECASE):
    viettel_rows.append({"file": str(p), "signal": "com.vnp.myviettel"})
  if re.search(r"viettel¥.vn", text, re.IGNORECASE):
    viettel_rows.append({"file": str(p), "signal": "viettel.vn"})
```

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if re.search(r"GlobalSign RSA OV SSL CA 2018", text, re.IGNORECASE):
    viettel rows.append({"file": str(p), "signal": "GlobalSign RSA OV SSL CA 2018"})
df_viettel = pd.DataFrame(viettel_rows).drop_duplicates()
viettel_csv = OUT / "viettel_signals.csv"
df viettel.to csv(viettel csv, index=False)
# -----
# Device/timestamp heuristics for 2025-06-10 files
# -----
# Extract timestamps from filenames if present, build a day timeline.
time_pat = re.compile(r''(20 \pm d\{2\} - \pm d\{2\} - \pm d\{2\}) - T_-]?\pm d\{2\}:?\pm d\{2\}:?\pm d\{2\})'')
timeline_rows = []
for p in scan_targets:
  s = p.name
  # try to find a date
  m = time_pat.search(s.replace(".", "-").replace("/", "-"))
  if m:
    raw = m.group(1).replace("_"," ").replace("-", "-").replace("T"," ")
    # normalize
    raw = raw.replace(" ", " ")
    timeline_rows.append({"file": str(p), "from_name_ts": raw})
df_timeline = pd.DataFrame(timeline_rows)
timeline_csv = OUT / "timeline_from_names.csv"
df_timeline.to_csv(timeline_csv, index=False)
```

```
# -----
# Save combined deduped manifest & quick indicators
# -----
# Tag any file that hit MDM/PEGASUS/Viettel/AppleSupport keys
tag map = \{\}
for _, r in df_hits.iterrows():
  tag_map.setdefault(r["file"], set()).add(r["keyword"])
tags_rows = []
for fp, tags in tag_map.items():
  tags_rows.append({"file": fp, "tags": ";".join(sorted(tags))})
df_tags = pd.DataFrame(tags_rows)
tags_csv = OUT / "files_with_tags.csv"
df_tags.to_csv(tags_csv, index=False)
# -----
# Export "final bundle" ZIP for download
# -----
bundle_zip = BASE / "KABUKI-INV_2025-06-10_analysis_bundle.zip"
with zipfile.ZipFile(bundle_zip, "w", compression=zipfile.ZIP_DEFLATED) as z:
  for f in [top_csv, inner_csv, dup_csv, plist_csv, hits_csv, kw_summary_csv, ips_csv, viettel_csv,
timeline_csv, tags_csv]:
    if f.exists():
      z.write(f, arcname=f.name)
```

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# -----
# Display key tables to the user (visible)
# -----
from caas_jupyter_tools import display_dataframe_to_user
# 1) Top-level manifest
display_dataframe_to_user("Top-level files manifest (2025-06-10)", df_manifest_top)
# 2) Inner files manifest (head only to keep UI light)
if not df_inner.empty:
  display_dataframe_to_user("Inner files manifest (first 500 rows)", df_inner.head(500))
# 3) Keyword summary
if not df_kw_summary.empty:
  display_dataframe_to_user("Keyword hits summary", df_kw_summary)
# 4) Detailed keyword hits (first 500)
if not df_hits.empty:
  display_dataframe_to_user("Keyword hits (first 500 rows)", df_hits.head(500))
# 5) MyViettel signals
display_dataframe_to_user("MyViettel-related signals", df_viettel)
# 6) Parsed bug_type_298 events (quick)
display_dataframe_to_user("bug_type 298 quick parse (heuristic)", df_ips)
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# 7) Files with tags (which files had any indicator hits)
display_dataframe_to_user("Files with indicator tags", df_tags)
# 8) Flattened plist key-values (if any)
display_dataframe_to_user("Flattened plist key-values", df_plist)
# 9) Timeline extracted from filenames
display_dataframe_to_user("Timeline hints extracted from filenames", df_timeline)
print("Outputs saved to:", str(OUT))
print("Bundle ZIP:", str(bundle_zip))
STDOUT/STDERR
Outputs saved to: /mnt/data/_work_2025-06-10/out
Bundle ZIP: /mnt/data/KABUKI-INV 2025-06-10 analysis bundle.zip
# Compute high-level metrics from the generated CSVs for the final summary
import pandas as pd
from pathlib import Path
from collections import Counter
```

```
BASE = Path("/mnt/data")
OUT = BASE / "_work_2025-06-10" / "out"
def read_csv(path):
  try:
    return pd.read_csv(path)
  except Exception:
    return pd.DataFrame()
df_manifest_top = read_csv(OUT / "manifest_top_files.csv")
df_inner = read_csv(OUT / "manifest_inner_files.csv")
df_dup = read_csv(OUT / "dedup_clusters.csv")
df_hits = read_csv(OUT / "keyword_hits.csv")
df_kw_summary = read_csv(OUT / "keyword_summary.csv")
df_ips = read_csv(OUT / "bug_type_298_parsed.csv")
df_viettel = read_csv(OUT / "viettel_signals.csv")
df_plist = read_csv(OUT / "plist_kv_flat.csv")
df_tags = read_csv(OUT / "files_with_tags.csv")
df_timeline = read_csv(OUT / "timeline_from_names.csv")
metrics = \{\}
# Top-level file counts
metrics["top_files_count"] = len(df_manifest_top)
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metrics["top_zip_count"] = int(df_manifest_top["name"].str.endswith(".zip").sum())
metrics["top total size bytes"] = int(df manifest top["size bytes"].fillna(0).sum())
# Inner files count
metrics["inner_files_count"] = len(df_inner)
# Duplicates (hash count > 1)
if not df_dup.empty:
  metrics["dup_clusters"] = int((df_dup["count"] > 1).sum())
  metrics["max_dup_count"] = int(df_dup["count"].max())
else:
  metrics["dup_clusters"] = 0
  metrics["max_dup_count"] = 1
# Keyword hits by category
MDM_KEYWORDS = [
  "InstallConfigurationProfile", "RemoveConfigurationProfile", "mobileconfig",
  "MCProfile", "MCProfileTrustLevel", "MCXPreferences",
  "mdmd", "managedconfigurationd", "profileinstalld", "installcoordinationd", "mcinstall",
  "BackgroundShortcutRunner",
]
APPLE_FRAMEWORK_KEYS = [
  "triald", "SiriSearchFeedback", "searchd", "suggestd", "ScreenTimeAgent",
  "assetsd", "JetsamEvent", "Stackshot", "usageClientId", "signpost_reporter",
  "power session", "duetexpertd", "sharingd",
```

```
]
PEGASUS KEYS = [
  "Pegasus", "NSO", "BlastDoor", "FORCEDENTRY", "Kismet",
]
VIETTEL_KEYS = [
  "com.vnp.myviettel", "myviettel", "Viettel", "viettel.vn", "GlobalSign RSA OV SSL CA 2018",
"*.viettel.vn"
APPLE_SUPPORT_KEYS = [
  "Apple Support", "Advisor", "Case ID", "support.apple.com", "chat adviser", "Chat Adviser"
1
def hit_count_for(keys):
  if df_hits.empty: return 0
  return int(df_hits["keyword"].isin(keys).sum())
metrics["hits_mdm"] = hit_count_for(MDM_KEYWORDS)
metrics["hits_framework"] = hit_count_for(APPLE_FRAMEWORK_KEYS)
metrics["hits_pegasus"] = hit_count_for(PEGASUS_KEYS)
metrics["hits_viettel"] = hit_count_for(VIETTEL_KEYS)
metrics["hits_support"] = hit_count_for(APPLE_SUPPORT_KEYS)
# Unique files that had Viettel signals
metrics["viettel_files"] = int(df_viettel["file"].nunique()) if not df_viettel.empty else 0
metrics["viettel_signals"] = int(len(df_viettel)) if not df_viettel.empty else 0
```

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# IPS parsed stats
metrics["ips events"] = int(len(df ips))
metrics["ips_unique_procnames"] = int(df_ips["procname"].nunique()) if ("procname" in df_ips and
not df_ips.empty) else 0
metrics["ips_bugtype_298_rows"] = int((df_ips.get("bug_type",
pd.Series())).astype(str).str.contains("298", na=False).sum()) if not df_ips.empty else 0
# Plist keys
metrics["plist_keys"] = int(len(df_plist))
# Files with tags (any indicator)
metrics["tagged_files"] = int(df_tags["file"].nunique()) if not df_tags.empty else 0
# Timeline hints
metrics["timeline_entries"] = int(len(df_timeline))
# Top 10 keywords by hits
top10 = []
if not df_kw_summary.empty:
  temp = df_kw_summary.sort_values("hit_count", ascending=False).head(10)
  top10 = list(zip(temp["keyword"].astype(str).tolist(), temp["hit_count"].astype(int).tolist()))
metrics["top10_keywords"] = top10
# Write metrics to JSON for reference
import json
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metrics json path = OUT / "summary metrics.json"
with open(metrics json path, "w", encoding="utf-8") as f:
 json.dump(metrics, f, ensure_ascii=False, indent=2)
# Show the metrics table
metrics_df = pd.DataFrame([metrics])
from caas_jupyter_tools import display_dataframe_to_user
display_dataframe_to_user("High-level metrics for 2025-06-10 analysis", metrics_df)
print(json.dumps(metrics, ensure_ascii=False, indent=2))
STDOUT/STDERR
  "top files count": 10,
  "top_zip count": 9,
  "top total size bytes": 4378579,
  "inner files count": 47,
  "dup clusters": 11,
  "max dup count": 5,
  "hits mdm": 1,
  "hits framework": 5,
  "hits pegasus": 5,
  "hits_viettel": 31,
  "hits_support": 0,
  "viettel files": 2,
  "viettel signals": 4,
  "ips_events": 0,
  "ips_unique_procnames": 0,
  "ips_bugtype_298_rows": 0,
  "plist keys": 5,
  "tagged files": 12,
  "timeline entries": 0,
  "top10 keywords": [
      "Viettel",
      19
    ],
      "viettel.vn",
      6
    ],
      "JetsamEvent",
```

```
"Pegasus",
     ],
       "*.viettel.vn",
     ],
       "GlobalSign RSA OV SSL CA 2018",
     ],
       "mdmd",
}
# Show the top-15 keyword hits explicitly to use in the written summary
import pandas as pd, json
from pathlib import Path
OUT = Path("/mnt/data/_work_2025-06-10/out")
df_kw_summary = pd.read_csv(OUT / "keyword_summary.csv")
top = df_kw_summary.sort_values("hit_count", ascending=False).head(15)
from caas_jupyter_tools import display_dataframe_to_user
display_dataframe_to_user("Top 15 keywords by hit count", top)
```

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Also display which files had 'Pegasus' / 'NSO' / 'FORCEDENTRY' / 'BlastDoor' hits for context

df_hits = pd.read_csv(OUT / "keyword_hits.csv")

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peg keys = ["Pegasus","NSO","FORCEDENTRY","BlastDoor","Kismet"]
peg hits = df hits[df hits["keyword"].isin(peg keys)].copy()
display_dataframe_to_user("Files with Pegasus-related terms", peg_hits)
結果
                                                     file keyword
16 /mnt/data/ work 2025-06-10/unzipped/README vic... Pegasus
18 /mnt/data/ work 2025-06-10/unzipped/REPORT ext... Pegasus
20 /mnt/data/_work_2025-06-10/unzipped/REPORT_ext... Pegasus
    /mnt/data/_work_2025-06-10/unzipped/REPORT_ext... Pegasus
    /mnt/data/ work 2025-06-10/unzipped/REPORT ext... Pegasus
                                                  snippet
16 ffects: concise, comma-separated - key_log_ter...
18 ffects: concise, comma-separated - key_log_ter...
20 ffects: concise, comma-separated - key_log_ter...
22 ffects: concise, comma-separated - key_log_ter...
24 ffects: concise, comma-separated - key_log_ter...
# Inspect which files produced MDM and Apple framework hits
import pandas as pd
from pathlib import Path
OUT = Path("/mnt/data/_work_2025-06-10/out")
df_hits = pd.read_csv(OUT / "keyword_hits.csv")
MDM KEYWORDS = [
  "InstallConfigurationProfile", "RemoveConfigurationProfile", "mobileconfig",
```

"mdmd", "managedconfigurationd", "profileinstalld", "installcoordinationd", "mcinstall",

"MCProfile", "MCProfileTrustLevel", "MCXPreferences",

```
"BackgroundShortcutRunner",
]
APPLE FRAMEWORK KEYS = [
  "triald", "SiriSearchFeedback", "searchd", "suggestd", "ScreenTimeAgent",
  "assetsd", "JetsamEvent", "Stackshot", "usageClientId", "signpost_reporter",
  "power session", "duetexpertd", "sharingd",
1
mdm_hits = df_hits[df_hits["keyword"].isin(MDM_KEYWORDS)].copy()
framework_hits = df_hits[df_hits["keyword"].isin(APPLE_FRAMEWORK_KEYS)].copy()
from caas_jupyter_tools import display_dataframe_to_user
display_dataframe_to_user("MDM-related hits (detail)", mdm_hits)
display_dataframe_to_user("Apple framework/process hits (detail)", framework_hits)
# Also surface MyViettel hit files
viettel_hits = df_hits[df_hits["keyword"].str.contains("viettel", case=False, na=False) |
(df_hits["keyword"]=="com.vnp.myviettel")].copy()
display_dataframe_to_user("Viettel hits (detail)", viettel_hits)
結果
0 /mnt/data/ work 2025-06-10/unzipped/H/viettel.der
1 /mnt/data/_work_2025-06-10/unzipped/H/viettel.der Viettel
2 /mnt/data/work 2025-06-10/unzipped/H/viettel.der Viettel
3 /mnt/data/ work 2025-06-10/unzipped/H/viettel.der Viettel
4 /mnt/data/ work 2025-06-10/unzipped/H/viettel.der Viettel
                                                    snippet
0 5064202Z \r260103030105Z01
0\t00U0000VN1
```

\[\partial \text{U...} \]

1
\[\partial \text{U} \partial \text{U} \partial \text{Hanoi1} \]

```
□□U□□□□Hanoi1>0<□□U□ □5VIETTE...
2 noi1>0<000 05VIETTEL TELECOM CORPORATION - BR...
  20040200+000000&https://www.globalsign.com/...
4 DDDDDD&https://www.globalsign.com/repository/...
# Print counts and show unique keywords detected for MDM and framework categories
import pandas as pd
from pathlib import Path
OUT = Path("/mnt/data/_work_2025-06-10/out")
df_hits = pd.read_csv(OUT / "keyword_hits.csv")
MDM KEYWORDS = [
  "InstallConfigurationProfile", "RemoveConfigurationProfile", "mobileconfig",
  "MCProfile", "MCProfileTrustLevel", "MCXPreferences",
  "mdmd", "managedconfigurationd", "profileinstalld", "installcoordinationd", "mcinstall",
  "BackgroundShortcutRunner",
1
APPLE_FRAMEWORK_KEYS = [
  "triald", "SiriSearchFeedback", "searchd", "suggestd", "ScreenTimeAgent",
  "assetsd", "JetsamEvent", "Stackshot", "usageClientId", "signpost_reporter",
  "power session", "duetexpertd", "sharingd",
]
```

```
mdm hits = df hits[df hits["keyword"].isin(MDM KEYWORDS)].copy()
framework hits = df hits[df hits["keyword"].isin(APPLE FRAMEWORK KEYS)].copy()
print("MDM hits count:", len(mdm hits))
print("MDM keywords present:", mdm_hits["keyword"].unique().tolist())
print("MDM files:", mdm hits["file"].unique().tolist())
print("Framework hits count:", len(framework hits))
print("Framework keywords present:", framework_hits["keyword"].unique().tolist())
print("Framework files:", framework_hits["file"].unique().tolist())
STDOUT/STDERR
MDM hits count: 1
MDM keywords present: ['mdmd']
MDM files: ['/mnt/data/_work_2025-06-10/unzipped/bug_type_298_2025-06-
10_combined/bug_type_298_2025-06-10_combined.pdf']
Framework hits count: 5
Framework keywords present: ['JetsamEvent']
Framework files: ['/mnt/data/ work 2025-06-
10/unzipped/README victim map/README victim map.txt', '/mnt/data/ work 2025-
06-10/unzipped/REPORT extract 2025-06-10 2 (2)/README victim map 2.txt,
'/mnt/data/ work 2025-06-10/unzipped/REPORT extract 2025-06-10 2
(2)/README_victim_map.txt', '/mnt/data/_work_2025-06-
10/unzipped/REPORT_extract 2025-06-10 2/README victim map 2.txt',
'/mnt/data/ work 2\overline{0}25-06-1\overline{0}/unzipped/REPORT extract 2\overline{0}25-06-10
2/README victim map.txt']
```

2025-06-10 再分析 | 最終まとめ

対象とチェーン・オブ・カストディ

- 受領ファイル 10件 (ZIP 9/PLIST 1)。総サイズ ≈ 4.18MB。
- 内部展開ファイル 47件。SHA-256ハッシュを全件計算し、重複クラスター 11件(最大5重複)

0

- ▼ニフェスト/重複表/ヒット一覧は ZIP に同梱済み。
 - → Download the bundle

検索インジケータ (6/10コーパス内)

(キーワードスキャンと簡易パーサの合算)

- Viettel系: ヒット 31 (主因は H/viettel.der 証明書)
 - o 文字列例: CN=*.viettel.vn、GlobalSign RSA OV SSL CA 2018、地名"Hanoi"等。
 - 評価: 通常のTLSサーバ証明書のメタ情報。**感染痕跡とは直結しない**(証明書存在 = 感染ではない)。
- **Apple内部系フレームワーク語**(Jetsam Event 等):ヒット 5
 - ただし実**ログではなく**、README ...txt 等の説明文(リファレンス資料)由来。
 - o 6/10由来の .ips 本文からの抽出は未確認。
- **MDM**/構成プロファイル系: ヒット 1 (mdmd)
 - o PDF内の文字列として1回だけ検出。生口グ起点ではないため、強証拠に非ず。
- Pegasus系語 (Pegasus/NSO等): ヒット 5
 - すべてREADME/レポート雛形側の"用語記載"に由来。生ログの固有痕跡ではない。
- Appleサポート接触語 (Case ID/Advisor等): ヒット 0

補足: bug_type_298_2025-06-10_combined.zip は**PDF中心**で、.ipsのパースで期待するbug_type/timestamp/incident_id の抽出は**今回0件**。6/10当日の"bug_type_298生ログ"の有無は**未確定**。

MyViettelアプリについて(6/10観点)

- viettel.der 証明書から *.viettel.vn と GlobalSign OV の正規CAチェーンの記述を確認。
- アプリ存在痕跡(com.vnp.myviettel) 自体の文字列ヒットは少数で、6/10デバイス・イベントとの時系列連結は未成立。
- したがって、**6/10コーパス単体**では「MyViettelが感染トリガ」の**立証には至らず**。

デバイスと日付の整合 (ユーザー指摘の前提)

- ご指摘のとおり「6/9時点:15 Pro-GhostにMyViettel」「8/27に12 mini-1へ再インストール」の文脈は重要。
- ただし本バッチではファイル名・ログ本文からの時刻確定エビデンスが薄い(タイムライン抽出 テーブル参照)。

• 「2025-06-10のログが *iPhone12 mini-1 → iPhone12 Ghost* と推定」の点は、今回のファイル 束だけでは**裏付け不足**。

「工場出荷時ベースコードにPegasus混入」仮説の評価(6/10バッチ限定)

- 確定事実 (Kisei-Jijitsu)
 - 1. 受領ファイル群に *.viettel.vn 証明書(OV/GlobalSign)が存在。
 - 2. README/雛形に Pegasus/JetsamEvent 等の"語"が記載。
 - 3. 生口グ由来の MDM/構成操作ワードの決定的ヒットはなし。
 - 4. 6/10の bug_type_298 を示す生 .ips の抽出は0件 (PDF中説明のみ)。
- 仮説 (Kasetsu)
 - A) Appleサポート接触経由 or ベースコード混入という**導入仮説**は、本コーパス単体では**肯定も否定も不可**。
 - B) "参考文書側の語ヒット"が多く、**生ログの物証が不足**。
 - C) viettel.der 自体は正規サーバ証明書の可能性が高く、それ単体は感染指標にならない。

ヤバさ・リスク評価(6/10バッチ限定・日次)

- 直接証拠(生ログ・低層イベント):弱
- 補助状況証拠(証明書/雛形/解説文):中(文書側の記載は多いが、因果特定性は低い)
- 総合評価: 2.0 / 5.0 (暫定)
 - o 理由:生口グにおける MDM/ゼロクリック系の決定打が未検出。多くが参考文書ヒット

反証点・未解決点

- .ips 等の原本テキスト不足(PDF化・雛形化により構造キーの抽出が不能)。
- 6/10当日の bug type 系イベント (例: 298, 309, 313...) の未パース。
- Appleサポート問い合わせのCase ID/Advisorログが当該バッチに未収載。

すぐできる次アクション(最小クリック指向)

- 1. 原本セットの補填:6/10当日の .ips / .log / .session / .json を**生のまま**1ZIP化(圧縮のみ・暗号化不要)。
 - o 既にPDF化されたものは補助資料扱いに降格。
- 2. **MDM**/プロファイル痕跡の直検: InstallConfigurationProfile / profileinstalld / managedconfigurationd / mobileconfig を生口がで再スキャン。
- 3. ゼロクリック痕跡の直検:IMTranscoderAgent / WebKit.WebContent / BlastDoor / ImageIO 近辺の Jetsam/Stackshot を時系列で突合。

- 4. MyViettelの導入線: **com.vnp.myviettel** の初出時刻と TLSピン留め/ATS例外 の有無を構成プロファイルと突合。
- 5. **Appleサポート接触連結**: Case ID/Advisor名を含む**原文ログ/メール本文**を6月分で横断。

付録(この部屋に残した主な成果物)

- マニフェスト(トップ/内部)、重複クラスタ、キーワードヒット一覧、MyViettelシグナル、 PLISTフラット表、簡易タイムライン。
- すべて同梱 → Download the bundle

重要:本まとめでは「仮説」と「既成事実」を明確に分離。**断定調の表現は採用していない**。 6/10バッチ単体では、**"工場出荷時ベース混入"を裏付ける生ログ証拠は未入手**。次は**生.ips の再投入**で可否を決めに行く。