

# LDM Filesystem binaries

- identityservicesd
- AppleAccountSettings
- PreferencesMigrator
- ReportCrash



# ReportCrash

The `LDMGlobalEnabled` setting is checked in the ObjC function via a block:

```
+[[OSACrashReport isInLDM]
```

Which is called in the following 2 functions via an `objc_msgSend` stub:

```
-[[OSACrashReport checkIfNeedsUrgentSubmission]
```

Snippet:

```
if ( (unsigned int)objc_msgSend_isInLDM(v138, v139) )
    (*(void (__fastcall **)(__int64, void **))(block + 16))(block, &off_10002FDB8);
```

This appears to be populating a NSDictionary's `ldm` key with a value of `__kCFBooleanTrue`. This will add “`ldm`”: 1 to the crashlogs.

```
-[[OSACrashReport checkIfNeedsUrgentSubmission]
```

Snippet:

```
if ( OSACrashReport->sroute_id ) {
    OSACrashReport->needsUrgentSubmission = 1;
} else if ( objc_msgSend_isInLDM() ) {
    if ( [[OSACrashReport problemType] isEqualToString:@"309"] ) { // 309 means not lightweight corpse and exceptionType != EXC_RESOURCE
        if ( has_run != -1 ) {
            dispatch_once(&has_run, &create_urgentSubmissionCount_dispatch_queue); // "com.apple.osanalytics.urgentSubmissionCount"
        }
        block[0] = (__int64)_NSConcreteStackBlock;
        block[1] = 0xC0000000LL;
        block[2] = (__int64)setUrgentSubmissionBasedOnDailyCount;
        block[3] = (__int64)&unk_100028880;
        block[4] = (__int64)self;
        dispatch_sync((dispatch_queue_t)urgentSubmissionCount_dispatch_queue, block);
    }
}
```

If `Lockdown Mode` is enabled (or if running a `beta OS`) this will set `OSACrashReport->needsUrgentSubmission = 1` for the first 75 (plus a random amount between 0-351) crashes per App per day.

I assume this marks them for additional scrutiny during analysis.