

Zombie process · Site Reliability Engineer HandBook

 s905060.gitbooks.io/site-reliability-engineer-handbook/content/zombie_process.html

- [Site Reliability Engineer HandBook](#)
- [Introduction](#)
- [Programming Language](#)

[Python](#)

- [Time Format](#)
- [Subprocess](#)
- [Multiprocess](#)
- [Rename](#)
- [SMTP](#)
- [Single instance of program](#)
- [Argparse](#)
- [Requests](#)
- [Pyinstaller](#)
- [Readlines](#)
- [Raw Input](#)
- [With Open](#)
- [Configparser](#)
- [Gzip](#)
- [Listdir](#)
- [Basename](#)
- [Dirname](#)
- [Traversing a Directory Tree](#)
- [Startswith](#)
- [Endswith](#)
- [Virtualenv](#)
- [Regular Expressions](#)
- [Supervisor](#)
- [Socket](#)
- [Exception Errors](#)
- [Raw input](#)
- [Threading](#)
- [Unittest](#)
- [Why is it better to use “#!/usr/bin/env NAME” instead of “#!/path/to/NAME” as my shebang?](#)
- [OS](#)
- [Decorator](#)
- [String Formatting](#)

- SimplePrograms
- 'all', 'any' are Python built-ins
- TemporaryFile
- How to capture stdout in real-time with Python
- Python simple techniques and common reference
- python reference fragments
- getpass
- Method overriding in Python
- Multiple levels of 'collection.defaultdict' in Python
- String Format
- Logging
- Convert Unicode Object to Python Dict
- The dir() Function
- Python dictionary has key() Method
- glob – Filename pattern matching
- Lambda, filter, reduce and map
- doctest – Testing through documentation
- Load Python code dynamically
- Map, Reduce, Zip, Filter
- DICTIONARY COMPREHENSION
- Linux Command Line Tool
 - Basic
 - DIFF
 - AC
 - AWK
 - CHMOD
 - NMAP
 - NETSTAT
 - Flock
 - Traceroute
 - FIND
 - GREP
 - Crontab
 - Kill
 - SED
 - CUT
 - CURL
 - IFCONFIG
 - TCPDUMP
 - TAR
 - LSOF

- [SORT](#)
- [Xargs](#)
- [Iptables](#)
- [xargs vs. exec {}](#)
- [Hdparm](#)
- [UNIQ](#)
- [STAT](#)
- [Execute Commands in the Background](#)
- [TAIL](#)
- [WGET](#)
- [Date](#)
- [FDISK](#)
- [Mount](#)
- [Make SWAP File](#)
- [Create a New User](#)
- [Create a New Group](#)
- [Setup SSH Passwordless Login in OpenSSH](#)
- [Parted](#)
- [RSYNC](#)
- [YUM](#)
- [RPM](#)
- [APT](#)
- [Install from Source](#)
- [Log Rotate](#)
- [FREE](#)
- [DF](#)
- [DU](#)
- [Sysctl](#)
- [NICE](#)
- [Renice](#)
- [PS](#)
- [DD](#)
- [BC](#)
- [LDD](#)
- [getcap, setcap and file capabilities](#)
- [Linux Basename](#)
- [PMAP](#)
- [Alternative](#)
- [Readlink](#)
- [logrotate](#)
- [PIDOF](#)

- Dmidecode
- lshw
- printenv
- SS
- w
- Strace
- pstree
- USERMOD
- ltrace
- ethtool
- IP
- Sar
- nethogs
- zip
- FPM
- getent
- ipmitool
- Building RPMs
- Megacli
 - Megacli package version
- RKhunter
- fping
- blkid
- FSCK
- Package Manager
- mktemp
- ls
- Comm
- taskset
- fio
- tree
- ARP
- lsblk
- How-To
 - CentOS: nf_conntrack: table full, dropping packet
 - How To Fix “Error: database disk image is malformed” On CentOS \ / Fedora
 - Finding the PID of the process using a specific port?
 - How-To create hashed SSH password
 - How to display and kill zombie processes
 - Shell command to bulk change file extensions in a directory (Linux)

- [8 Powerful Awk Built-in Variables – FS, OFS, RS, ORS, NR, NF, FILENAME, FNR](#)
- [Changing the Time Zone](#)
- [HOW DO I DISABLE SSH LOGIN FOR THE ROOT USER?](#)
- [How-To rename the extension for a batch of files?](#)
- [How-To disable IPv6 on RHEL6 \\/ CentOS 6 \\/ etc](#)
- [How to clear the ARP cache on Linux?](#)
- [How-To crontab running as a specific user](#)
- [Ansible – exclude host from playbook execution](#)
- [HOWTO: Use Wireshark over SSH](#)
- [How-To Change Network Interface Name](#)
- [How-To Creating a Partition Size Larger Than 2TB](#)
- [Hot-To Linux Hard Disk Format Command](#)
- [Hadoop Troubleshooting](#)
- [Hive Troubleshooting](#)
- [HowTo Set up hostbased authentication for passphraseless SSH communication.](#)
- [Difference between a cold and warm reboot](#)
- [ls -l explained](#)
- [df falsely showing 100 per cent disk usage](#)
- [FCK explained](#)
- [Manually generate password for \\/etc\\/shadow](#)
- [How To Change Timezone on a CentOS 6 and 7](#)
- [Setting ssh private key forwarding](#)
- [Persist keys in ssh-agent on OS X](#)
- [SSH Essentials: Working with SSH Servers, Clients, and Keys](#)
- [How to Change JVM Heap Setting \(-Xms -Xmx\) of Tomcat – Configure setenv.sh file – Run catalina.sh](#)
- [SSH ProxyCommand example: Going through one host to reach another server](#)
- [How to get Linux's TCP state statistics](#)
- [Linux TCP retransmission rate calculation](#)
- [How to determine OOM](#)
- [How-to check Java process heapsize](#)
- [Troubleshooting network issues](#)
- [How to check what sudo acces a user has?](#)
- [How to copy your key to a remote server?](#)
- [Linux date and Unix timestamp conversion](#)
- [SSH client personalized configuration](#)
- [How to Error Detection and Correction](#)
- [How To Kerberos](#)
- [How to identify defective DIMM from EDAC error on Linux](#)

- [Howto Install and Configure Cobbler on Centos 6](#)
- [How To Use GPG to Encrypt and Sign Messages on an Ubuntu 12.04 VPS](#)
- [HowTo: Debug Crashed Linux Application Core Files Like A Pro](#)
- [Create init script in CentOS 6](#)
- [Linux Change Disk Label Name on EXT2 \ / EXT3 \ / EXT4 File Systems](#)
- [How to retrieve and change partition's UUID Universally Unique Identifier on linux](#)
- [Using Text-Mode Serial Console Redirection](#)
- [How to Write Linux Init Scripts Based on LSB Init Standard](#)
- [How to create a Debian package](#)
- [How to create a RPM Package](#)
- [How to solve EDAC DIMM CE Error](#)
- [How to solve fsck.ext4: Unable to resolve UUID\ / LABEL](#)
- [How to expand an existing LSI raid array using MegaCli](#)
- [How to change user GID and UID in Ubuntu](#)
- [How to read a segfault kernel log message](#)
- [How to add cron job via command line](#)
- [How to restrict process CPU usage using nice, cpulimit, and cgroups](#)
- [Storage](#)
 - [Object Storage](#)
 - [How an object store differs from file and block storage](#)
- [Monitoring](#)
 - [Nagios](#)
 - [Zabbix](#)
 - [Graphite](#)

[The architecture of clustering Graphite](#)
- [Database](#)
- [Algorithm](#)
 - [Insertion Sort](#)
 - [Hill Sort](#)
 - [Bubble Sort](#)
 - [Quick Sort](#)
 - [Directly Select Sort](#)
 - [Heap Sort](#)
 - [Merge Sort](#)
 - [Radix Sort](#)
 - [Cache algorithm definition](#)
- [Software Engineering](#)
- [Data Structure](#)

- Service
 - Cloud-Init
 - ETCD
 - RESTful API HTTP methods
 - Web cache
 - Mesos
 - ELK
 - Cassandra
 - Hive
 - Hive notes
 - Elasticsearch
 - Scylla
 - Zookeeper
- Automation Tool
 - Ansible
 - Salt
 - Salt use notes
- Networking Devices
 - Cisco
 - Juniper
- Version Control
- Editor
 - VIM



Powered by **GitBook**

Zombie process

On Unix and Unix-like computer operating systems, a zombie process or defunct process is a process that has completed execution (via the exit system call) but still has an entry in the process table: it is a process in the "Terminated state".

This occurs for child processes, where the entry is still needed to allow the parent process to read its child's exit status: once the exit status is read via the wait system call, the zombie's entry is removed from the process table and it is said to be "reaped". A child process always first becomes a zombie before being removed from the resource table.

In most cases, under normal system operation zombies are immediately waited on by their parent and then reaped by the system – processes that stay zombies for a long time are generally an error and cause a resource leak.

The term zombie process derives from the common definition of zombie — an undead person. In the term's metaphor, the child process has "died" but has not yet been "reaped". Also, unlike normal processes, the kill command has no effect on a zombie process.

Zombie processes should not be confused with orphan processes: an orphan process is a process that is still executing, but whose parent has died. These do not remain as zombie processes; instead, (like all orphaned processes) they are adopted by init (process ID 1), which waits on its children. The result is that a process that is both a zombie and an orphan will be reaped automatically.

PROCESS STATES

- Zombie: has completed execution, still has an entry in the process table
- Orphan: parent has finished or terminated while this process is still running
- Daemon: runs as a background process, not under the direct control of an interactive user