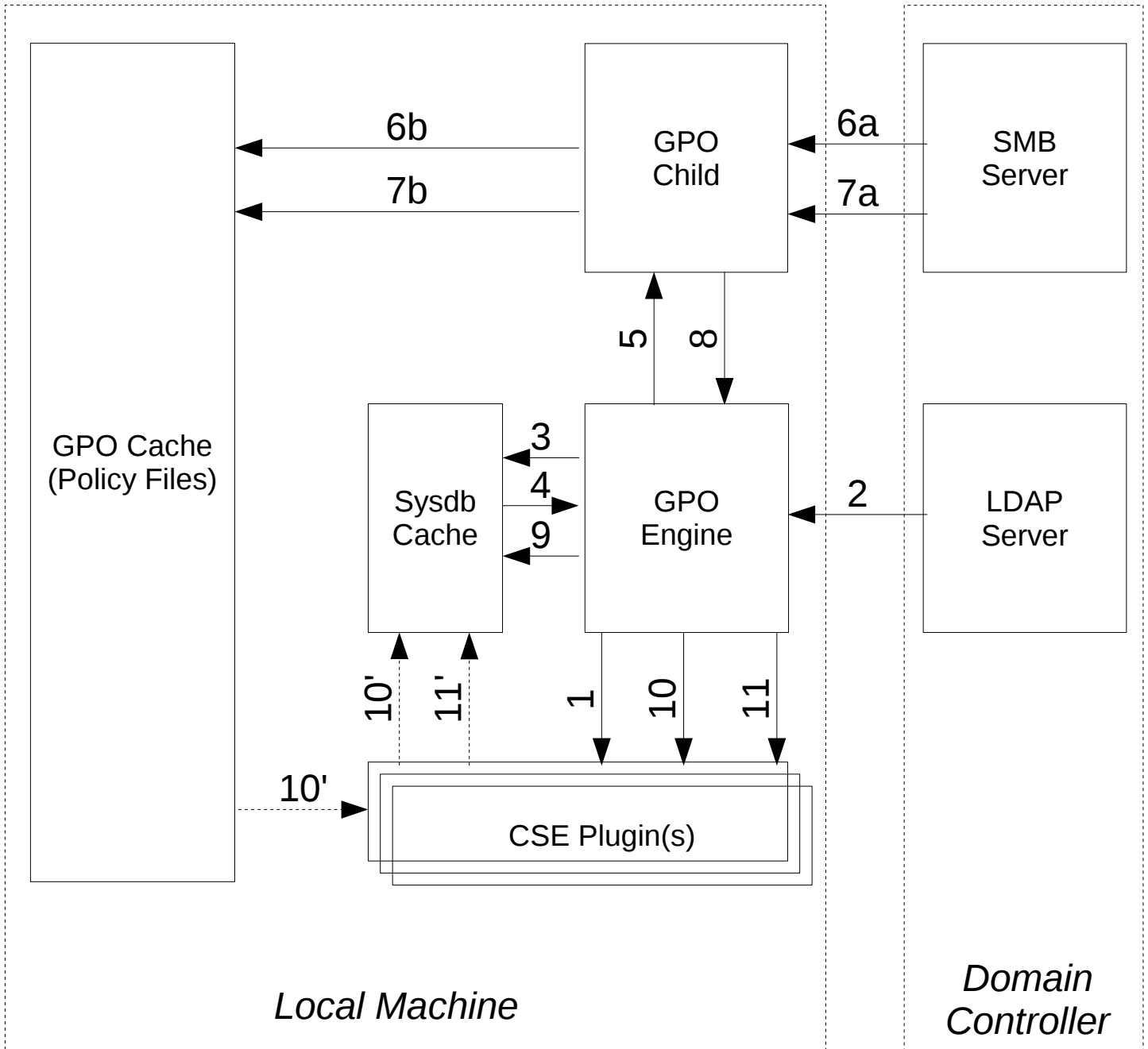


GPO Processing Data Flow Diagram



This diagram shows the set of steps taken during GPO Processing when ***ad_gpo_access_send()*** is called. The diagram assumes that CSE Plugin registration and initialization has already taken place. The sequence of steps begins with the GPO Engine. The next page gives details for the following three scenarios:

- online mode, *policy_file_timeout* has expired (i.e. retrieve fresh policy files)
- online mode, *policy_file_timeout* hasn't expired (i.e. use previously cached policy files)
- offline_mode

ONLINE MODE (policy file timeout has expired; retrieve fresh policy files)

1. GPO Engine calls cse_preprocess for each registered cse plugin
(hbac plugin permits or denies access immediately if pam service maps to PERMIT or DENY)
2. GPO Engine retrieves applicable gpo-guids from LDAP server
3. GPO Engine deletes all policy settings from the GPO Result object in sysdb
for each applicable gpo-guid {
 4. retrieve cache_entry for gpo_guid (if any);
get cached_gpt_version and cached_policy_file_timeout;
in this case, notice that policy_file_timeout has expired (send_to_child=true)
 5. send smb_uri components, cached_gpt_version, and cse_suffixes to gpo_child
 - 6a. gpo_child retrieves GPT.INI file for gpo-guid
 - 6b. gpo_child stores GPT.INI in GPO Cache
 - 7a.. if sysvol_gpt_version warrants, child retrieves policy files for all cse_suffixes
 - 7b. if sysvol_gpt_version warrants, child stores policy files for all suffixes to GPO Cache
 8. gpo_child returns status and sysvol_gpt_version to GPO Engine
 9. GPO Engine stores sysvol_gpt_version in sysdb
 10. GPO Engine calls cse_process for each registered cse_plugin
 - 10'. (hbac plugin retrieves policy file from GPO Cache, parses it, and stores settings for **all** gpo_map_types to GPO Result object)}
11. GPO Engine calls cse_postprocess for each registered cse_plugin
- 11'. (hbac plugin retrieves resultant policy setting for **specific** gpo_map_type and applies settings)

ONLINE MODE (policy file timeout hasn't expired; use previously cached policy files)

1. GPO Engine calls cse_preprocess for each registered cse plugin
(hbac plugin permits or denies access immediately if pam service maps to PERMIT or DENY)
2. GPO Engine retrieves applicable gpo-guids from LDAP server
3. GPO Engine deletes all policy settings from the GPO Result object in sysdb
for each applicable gpo-guid {
 4. retrieve cache_entry for gpo_guid (if any);
get cached_gpt_version and cached_policy_file_timeout;
in this case, notice that policy_file_timeout has **not** expired (send_to_child=false)
 10. GPO Engine calls cse_process for each registered cse_plugin
 - 10'. (hbac plugin retrieves policy file from GPO Cache, parses it, and stores settings for **all** gpo_map_types to GPO Result object)}
11. GPO Engine calls cse_postprocess for each registered cse_plugin
- 11'. (hbac plugin retrieves resultant policy setting for **specific** gpo_map_type and applies settings)

OFFLINE MODE

1. GPO Engine calls cse_preprocess for each registered cse plugin
(hbac plugin permits or denies access immediately if pam service maps to PERMIT or DENY)
11. GPO Engine calls cse_postprocess for each registered cse_plugin
- 11'. (hbac plugin retrieves resultant policy setting for **specific** gpo_map_type and applies settings)