Warning: this can destroy my reputation
Self Service Password

- Web interface to modify password
- LDAP directory (OpenLDAP, 389DS, Active Directory...) 
- Reset by mail, SMS or questions 
- Change SSH key
CVE-2018-12421

LTB (aka LDAP Tool Box) Self Service Password before 1.3 allows a change to a user password (without knowing the old password) via a crafted POST request, because the ldap_bind return value is mishandled and the PHP data type is not constrained to be a string.

https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2018-12421
LDAP connection

TCP connection
Authentication (BIND)
Answer BIND with return code
Lookup (SEARCH)
Answer SEARCH with return code
Authentication (BIND)
Answer BIND with return code
Modification (MODIFY)
Answer MODIFY with return code
Deconnection (UNBIND)
$bind = ldap_bind($ldap, $userdn, $oldpassword);
$errno = ldap_errno($ldap);
if ( $errno ) {
    $result = "badcredentials";
    error_log("LDAP - Bind user error $errno (.ldap_error($ldap))."");
} else {
    # Code for valid credentials
}
$bind = ldap_bind($ldap, $userdn, $oldpassword);
if ( !$bind ) {
    $result = "badcredentials";
    $errno = ldap_errno($ldap);
    if ( $errno ) {
        error_log("LDAP - Bind user error $errno
                (.ldap_error($ldap).")");
    }
} else {
    # Code for valid credentials
}