



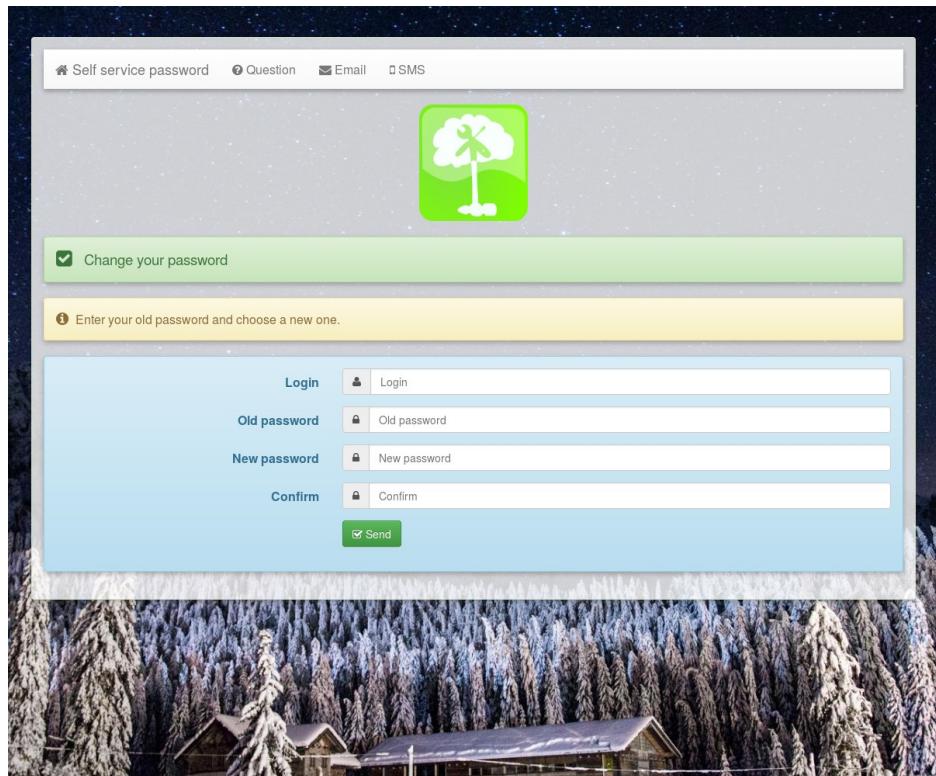
# Pass the SALT 2018

## Warning: this can destroy my reputation

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# Self Service Password



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

Definition from Wikipedia

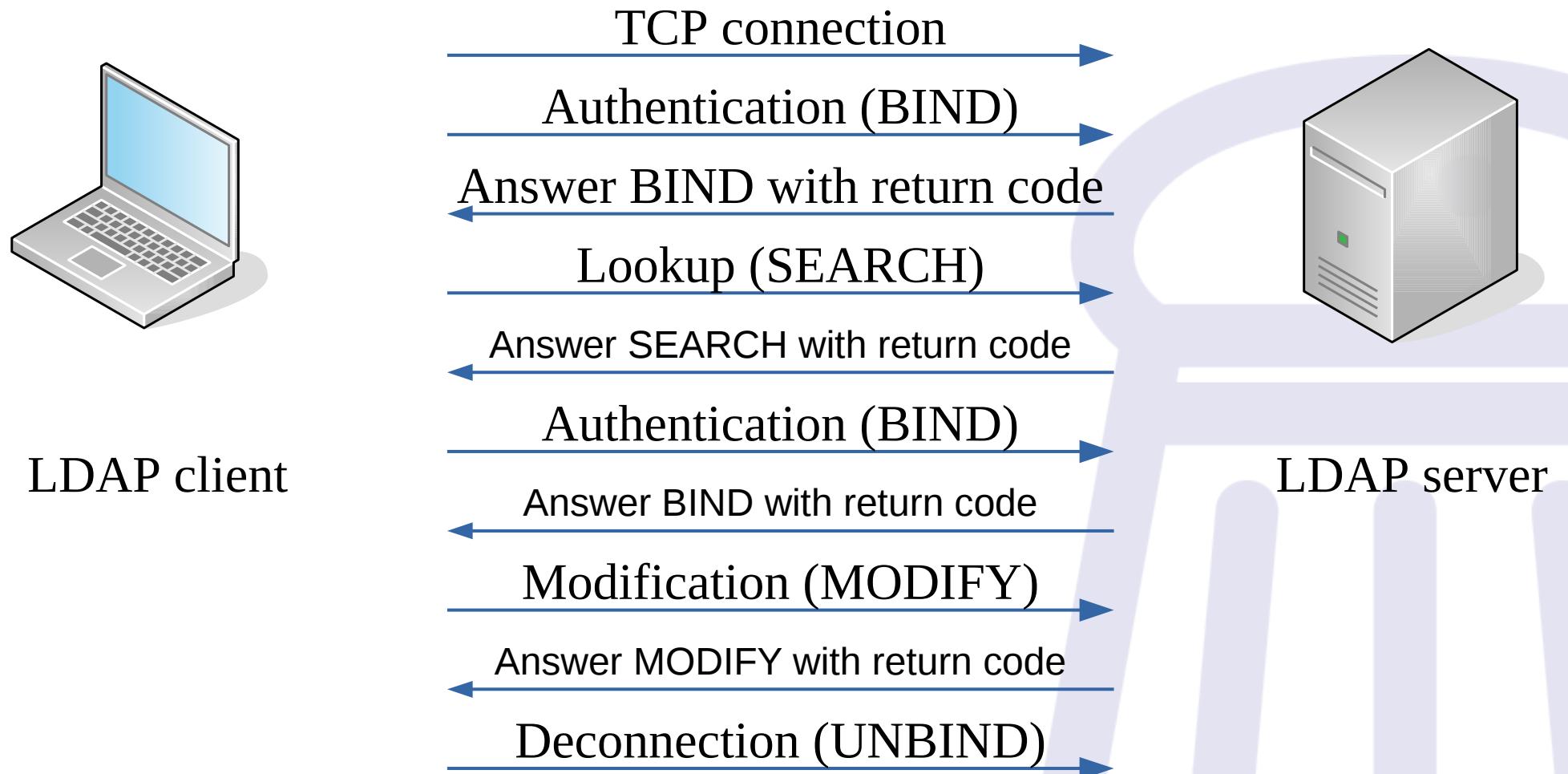
# CVE-2018-12421

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



# Faulty code

```
$bind = ldap_bind($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  
}
```



# Fixed code

```
$bind = ldap_bind($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  
}
```

