XACK Inc.

How to install the XACK DNS on Amazon AWS

Thank you for your review of XACK products.
We will guide you through the installation procedure of XACK DNS on Amazon AWS.

◆ Affected products
XACK DNS

◆ Evaluation Period
Base license: 1 month in principle
Tester license: 2 weeks in principle
* Long-term issuance is also possible, such as campaign application. Please contact our staff.

◆ Operating environment
Amazon EC2 instance t2.medium or higher

◆ Deployment Procedure

1. Please contact us to obtain a license file.

2. Open the Amazon EC2 Dashboard (https://console.aws.amazon.com/ec2/).

3. In the navigation bar at the top of the screen, the current AWS Region is displayed, and you can choose the region in which you want to launch the instance.
Currently, the AMI is published in Asia Pacific (Tokyo) ap-northeast-1, Asia Pacific (Osaka) ap-northeast-3, and US East (N. Virginia) us-east-1, so if you select a region other than these, you will not be able to perform the operations from step 5 onwards. If you wish, we can publish it in another region, so please let us know.

4. On the Amazon EC2 Dashboard, choose **Launch instance**.

5. Under **Application and OS Images (Amazon Machine Image)**, choose **Browse more AMIs**, choose **AWS Marketplace AMIs**, By entering 'XACK DNS' in the search box at the top, [XACK DNS] will be displayed, so select it.

6. A subscription confirmation window will be displayed. This is the subscription for using AlmaLinux with XACK DNS installed. Please select "Subscribe when instance launches" or "Subscribe now".

7. For **Instance type**, choose an instance type that is t2.medium or greater.

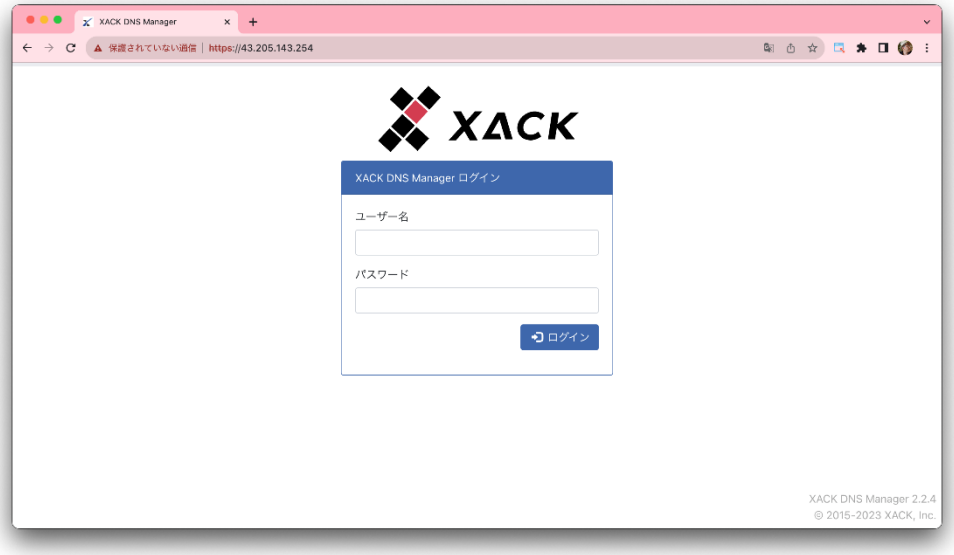
8. **Under Key pair (login)**, for Key pair name, choose an existing key pair or create a new one.

9. Under Network settings, for **Firewall (security groups)**, choose the appropriate security group. Please note that depending on the settings, it is not possible to send DNS queries to XACK DNS from the outside.

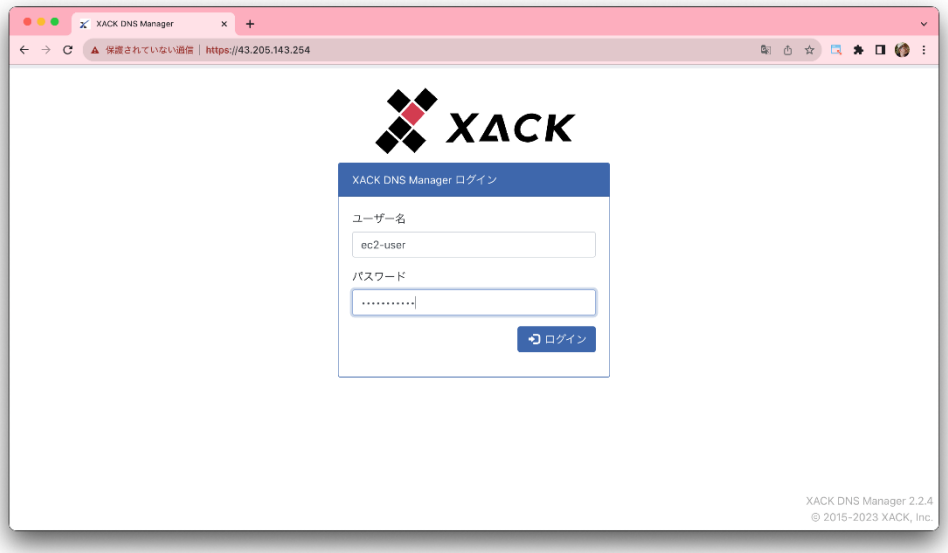
10. In the **Summary panel**, choose **Launch instance**.

11. Start your browser and access the following URL.
    https:// Public IPv4 address of the launched instance/

12. Log in



"ユーザー名" refers to the user name, so enter 'ec2-user'.
"パスワード" refers to the password, so enter the Instance ID of the launched instance.


XACK DNS Manager
保護されていない通信 | https://43.205.143.254
XACK
XACK DNS Manager ログイン
ユーザー名
ec2-user
パスワード
ログイン
XACK DNS Manager 2.2.4
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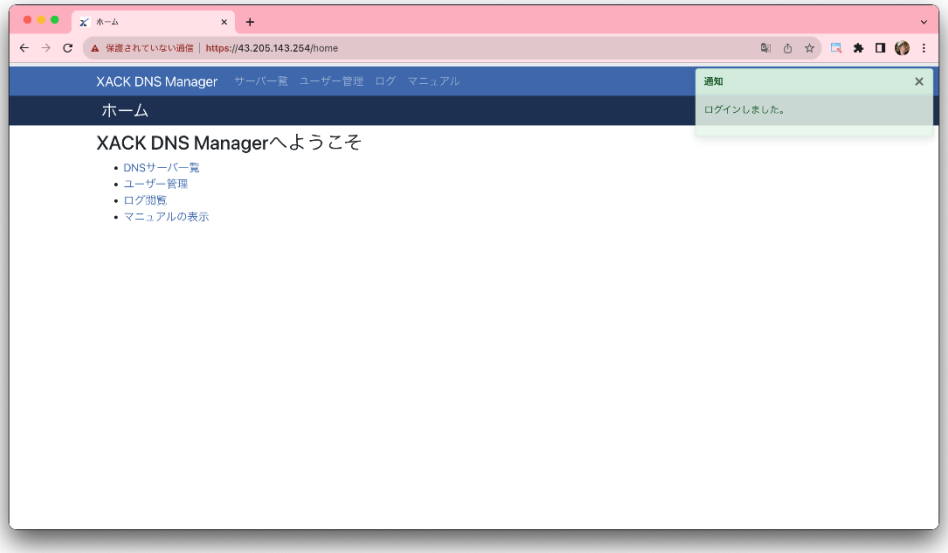
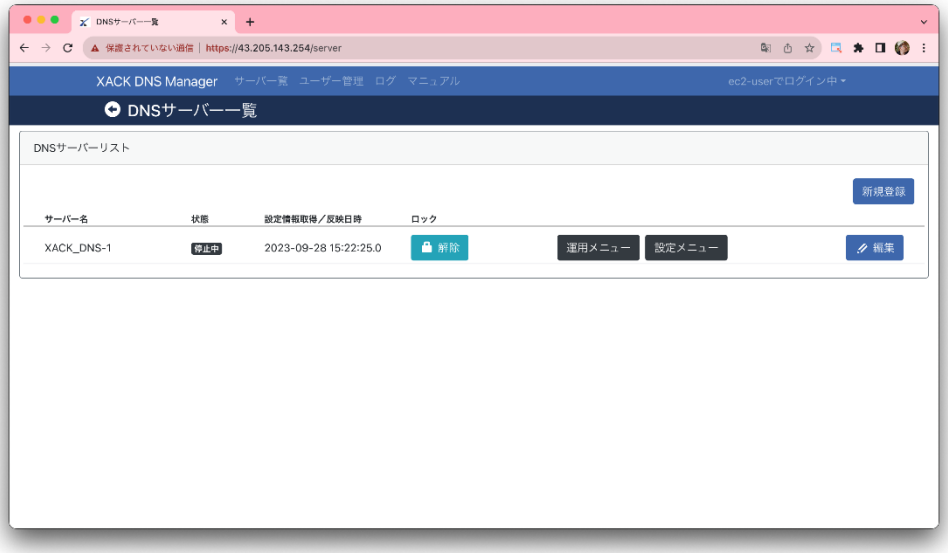
13. Displays a list of DNS servers.

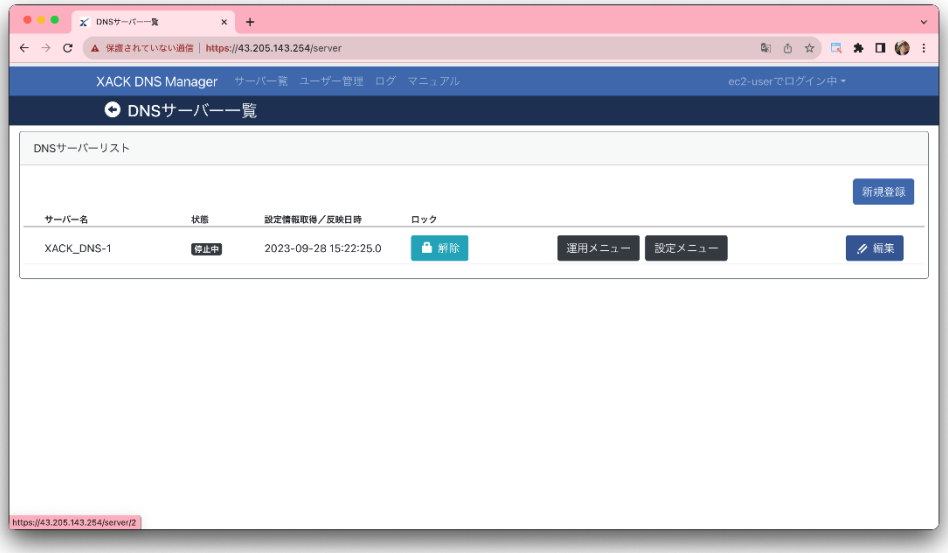


Click [DNS サーバー一覧] on the above screen will take you to the DNS server list screen.
(Press the [×] button in the upper right corner to delete the notification "通知　ログインしました。" in the upper right corner.)



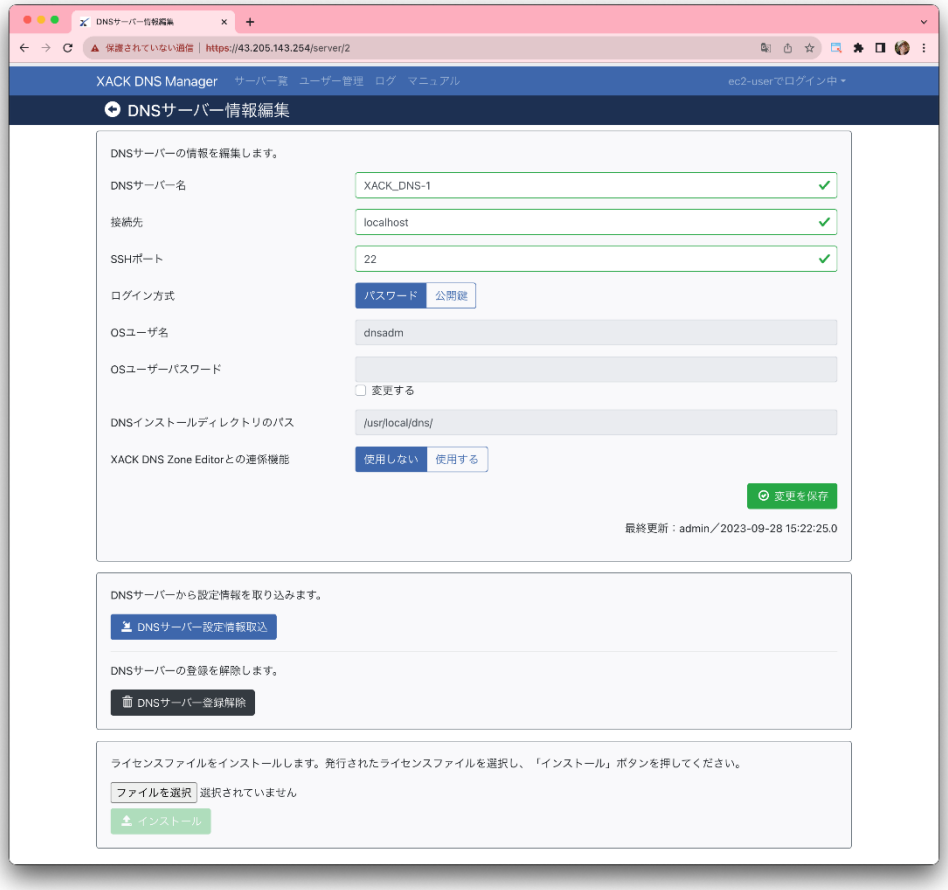
This is the DNS server list screen. By default, one DNS server called "XACK_DNS-1" is configured.

14. Install the license file.

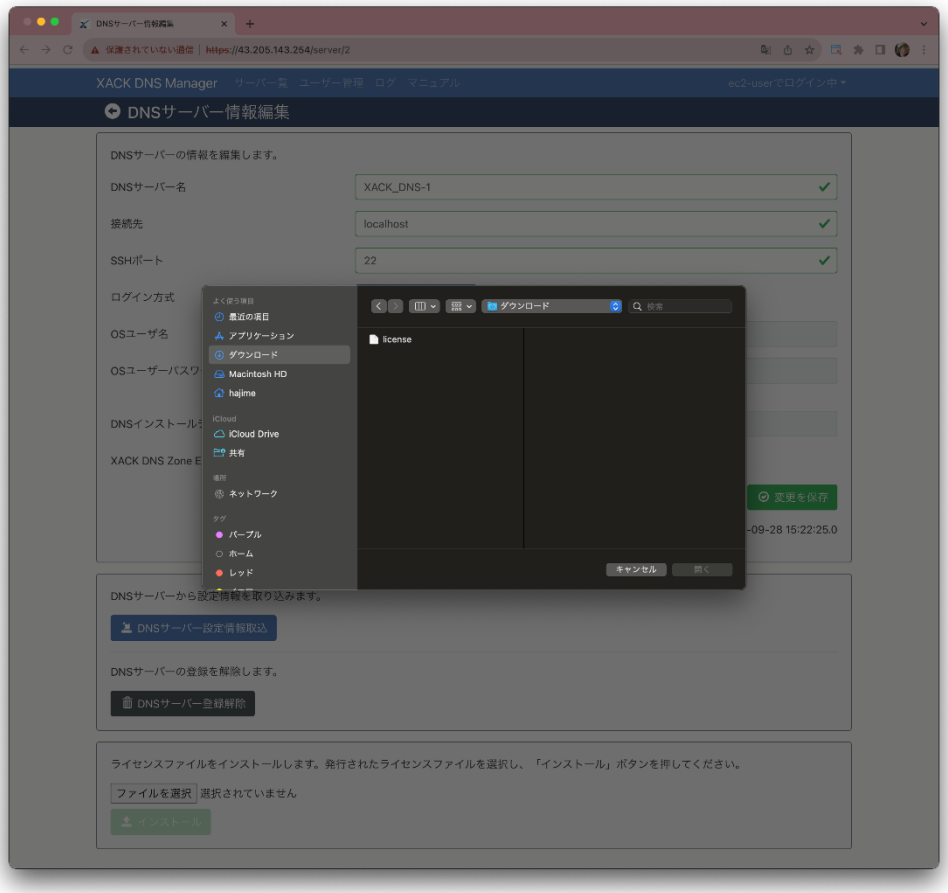


Click the [編集] button on the right side of the above.

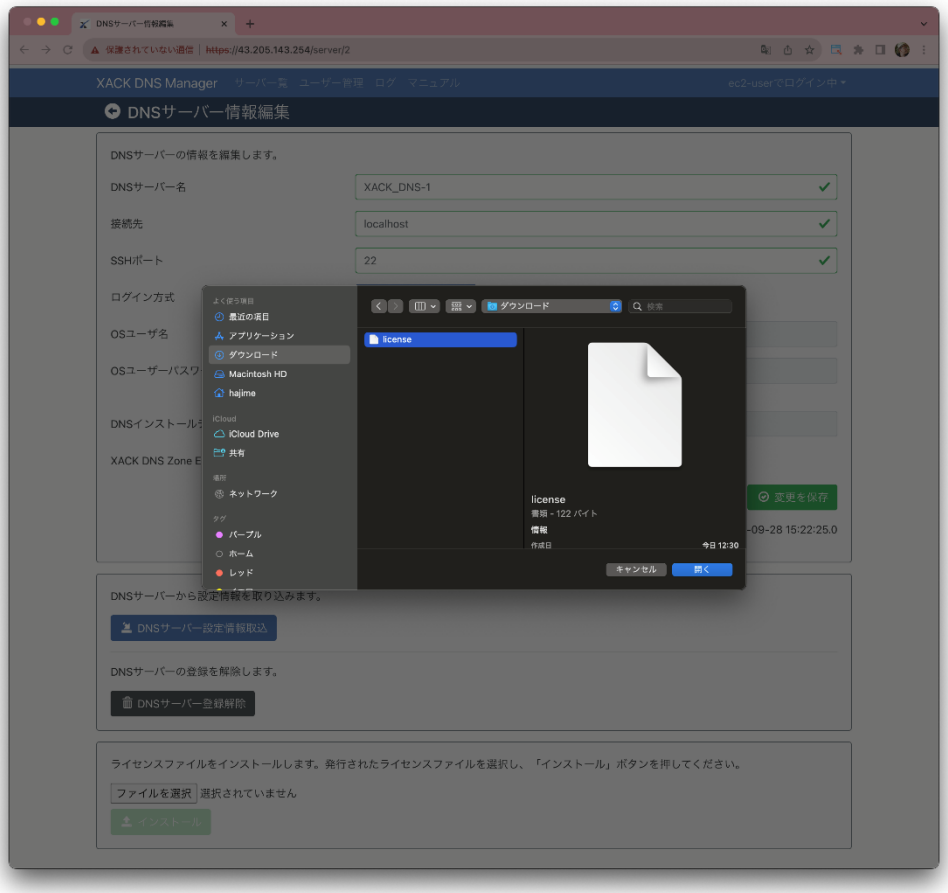
The "DNS サーバー情報編集" screen is used to edit DNS server information.



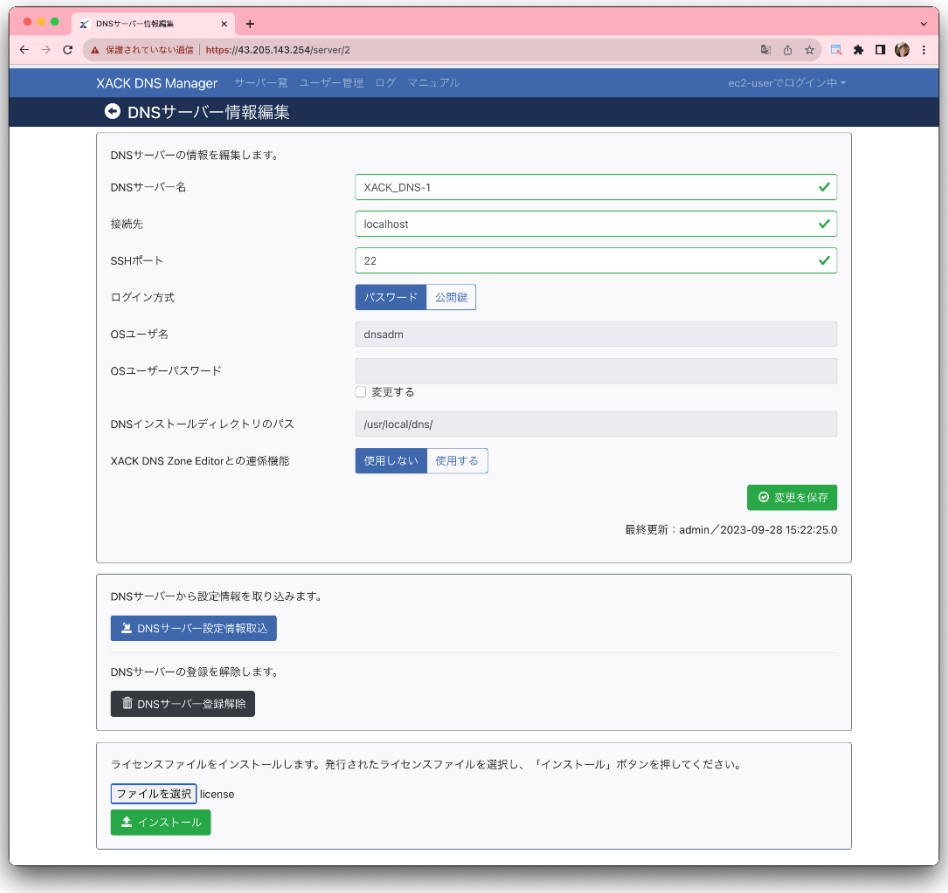
To install the license file, click [ファイルを選択] at the bottom to display the file selection screen.



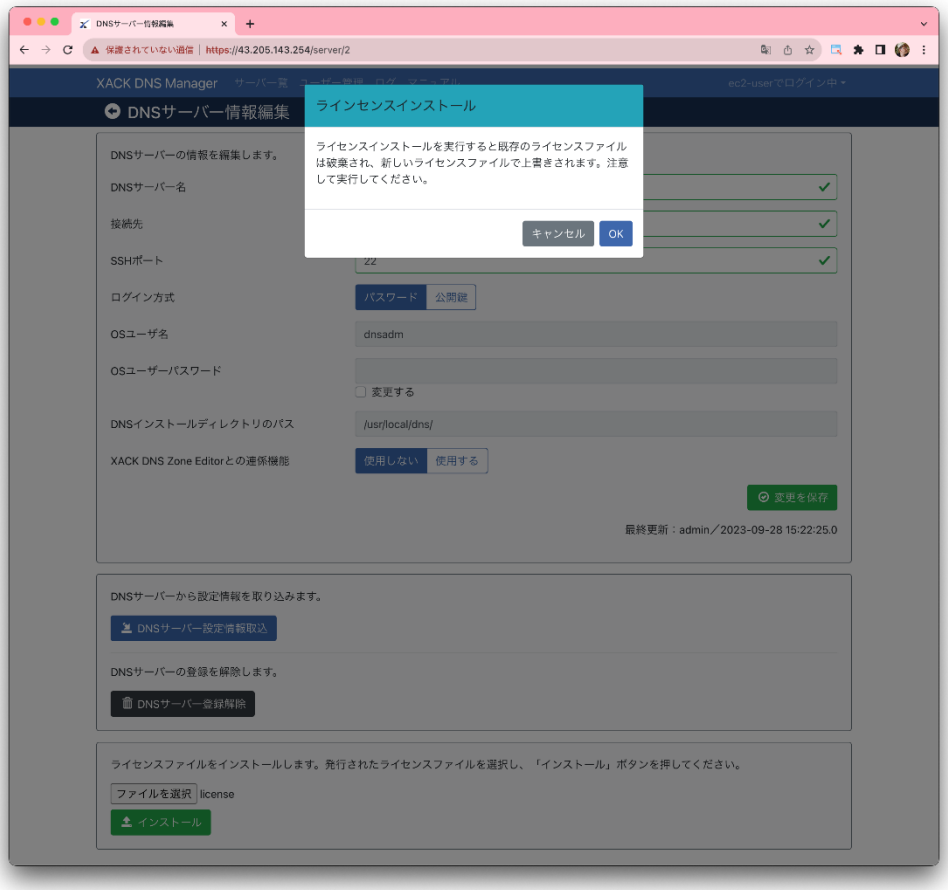
(The file selection screen differs depending on the OS.) The image above shows the macOS display)



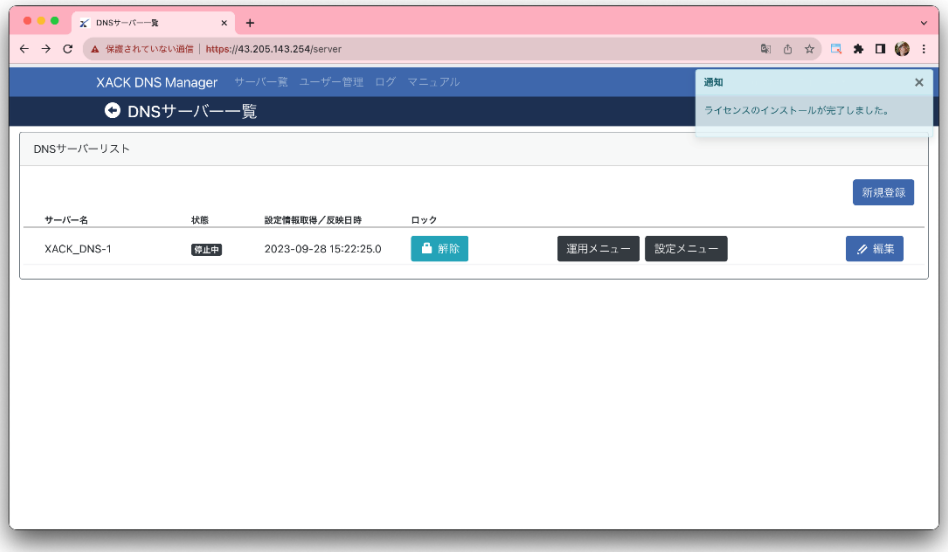
From the file selection screen, specify the license file received in item 1.



As you can see, the file name will be displayed on the right side of the [ファイル選択] button, and the [インストール] button will be enabled, so please press the [インストール] button will install the license file.



A confirmation pop-up will be displayed, so press the [OK] button.
The pop-up window says, "When you perform a license installation, the existing license file will be discarded and overwritten with a new license file. Please proceed with caution."

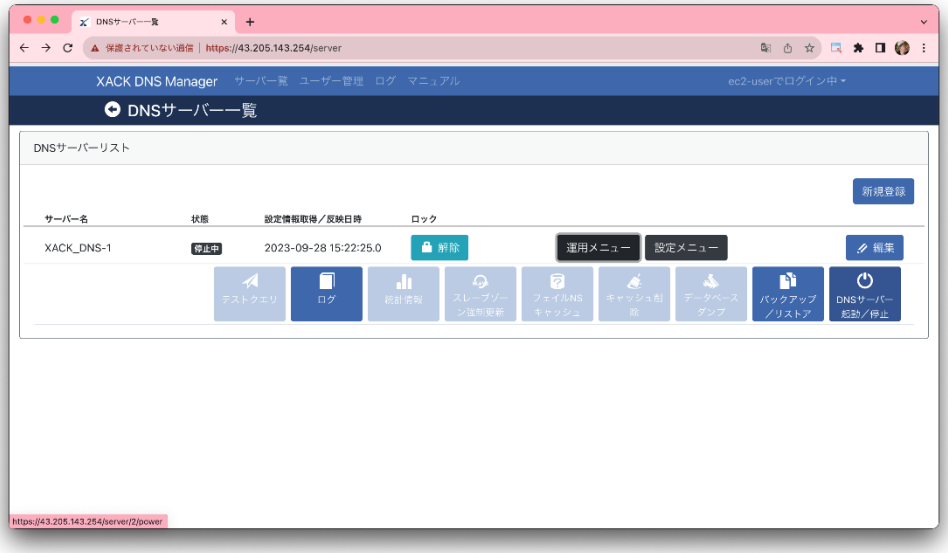


If the message "ライセンスのインストールが完了しました。" is displayed in the upper right corner, the license file has been successfully installed. If you see

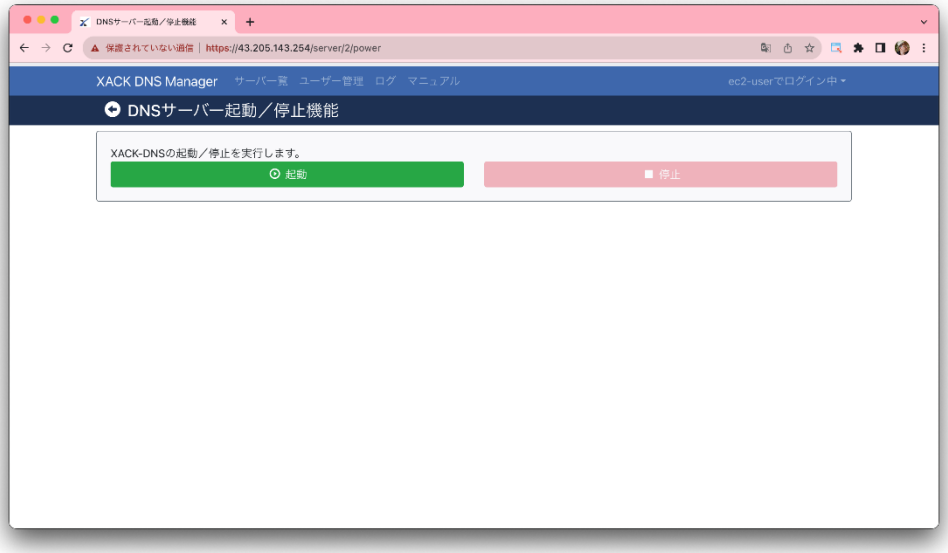
anything else, the license file may be corrupted or you may have selected the wrong file, so please check again and contact us if the situation does not change.

15. Start XACK DNS

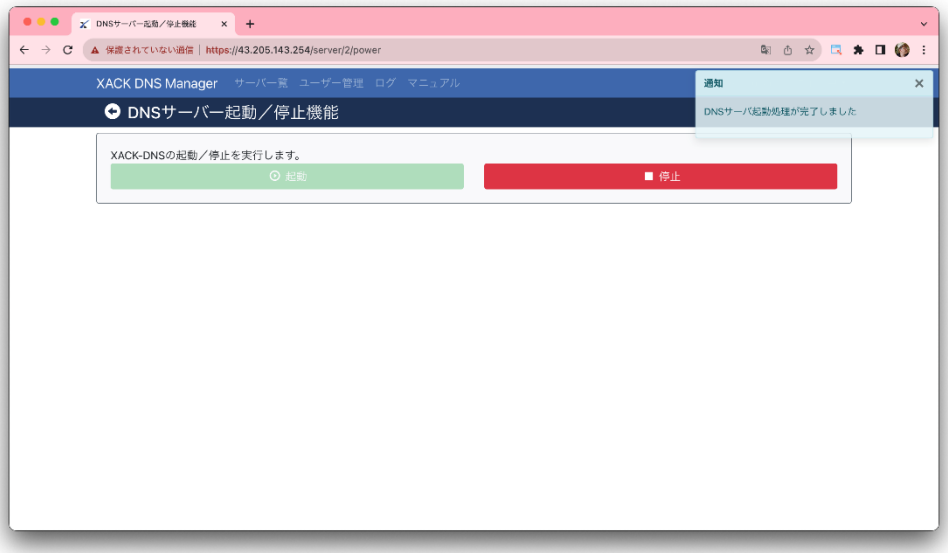
When you press the [運用メニュー] button, a menu related to operations will be displayed as shown below.



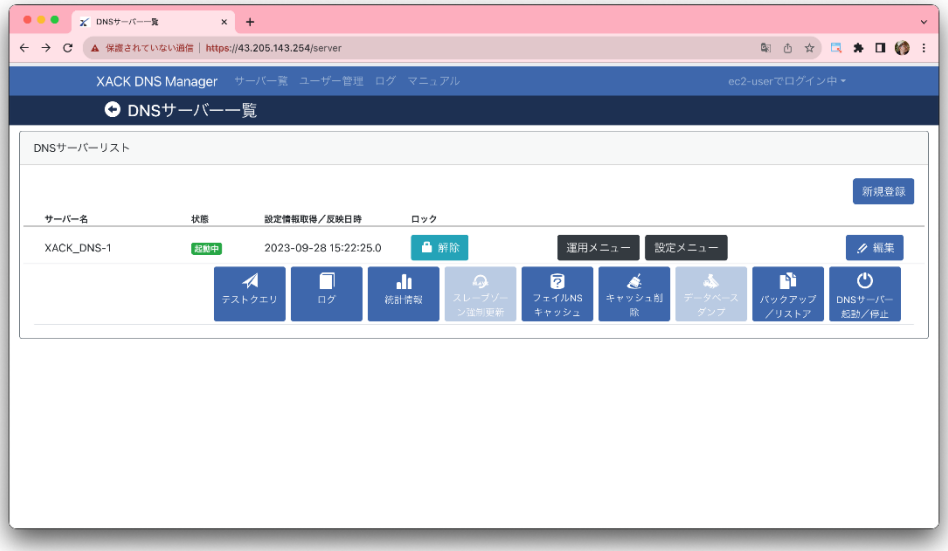
Click [DNS サーバー 起動/停止] on the far right.



The "DNS サーバー起動/停止機能" screen will be displayed, so you can start XACK DNS by pressing the [起動] button on the left.



When this message appears, the startup is complete.
Press the [←] button on the left side of the "DNS サーバー起動/停止機能" display to return to the original screen.

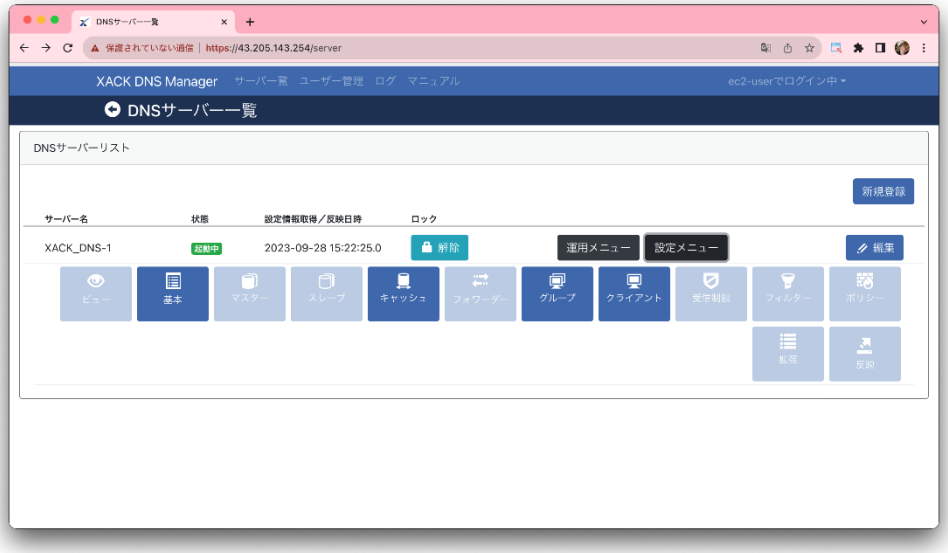


"サーバー名" is the name of the server. If you look at the "状態" of "XACK_DNS-1", it says "起動中", so you can see that it is starting up.

16. Checking the settings

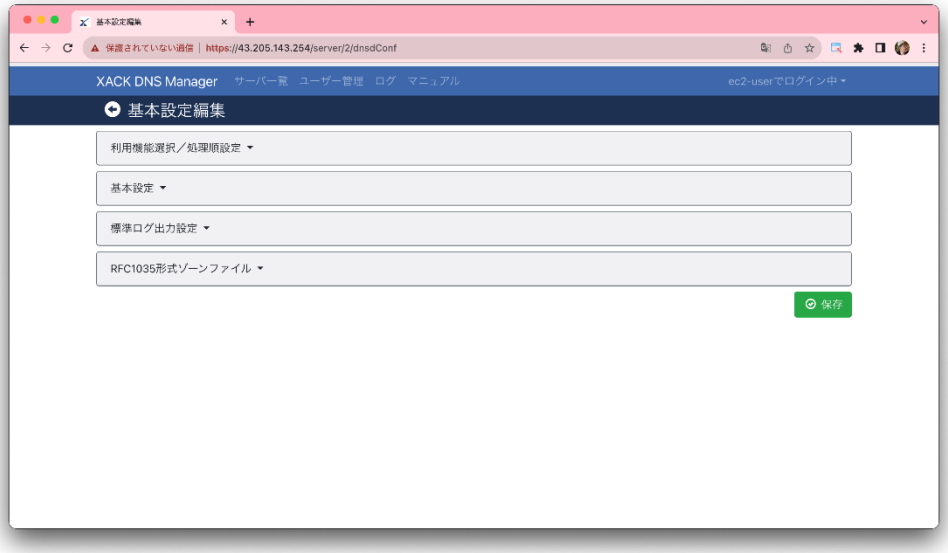
In the initial state, XACK DNS is configured as a cache DNS server (also known as a full-service resolver).

Click [設定メニュー] and take a look at the settings.

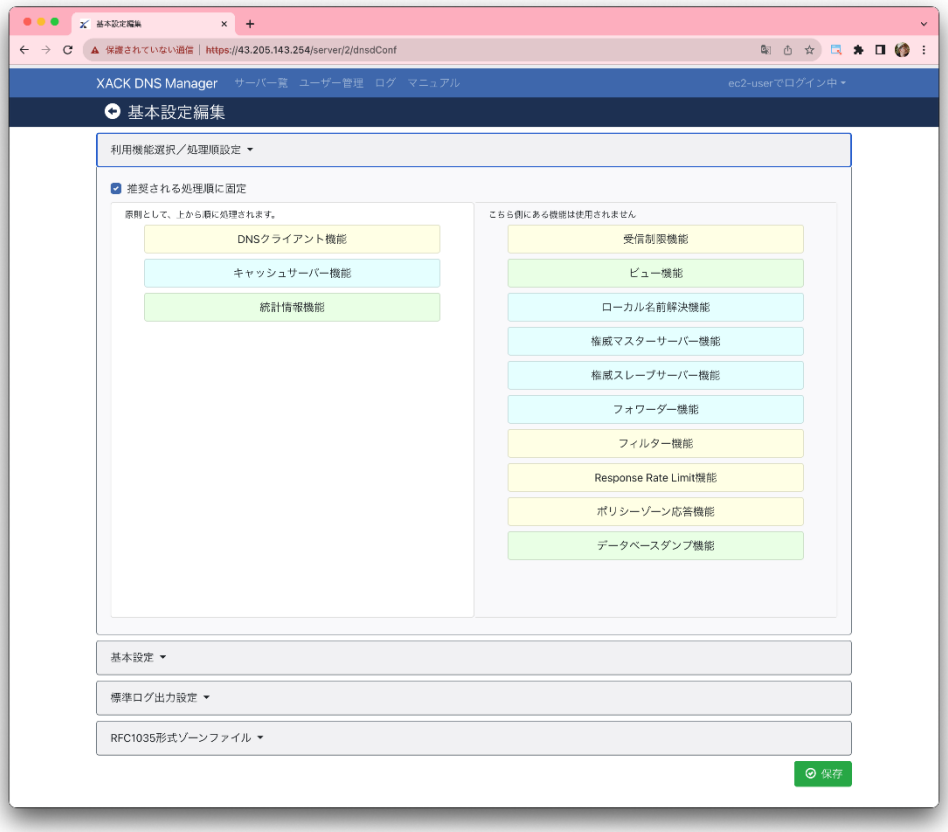


This is the screen after pressing [設定メニュー].

Next, press the [基本] button.

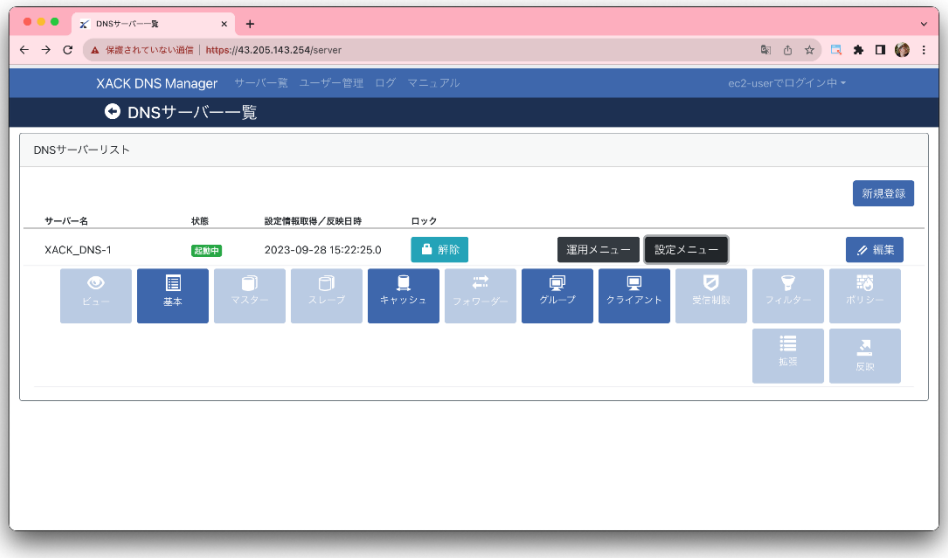


Press the [利用機能選択／処理順設定] button.

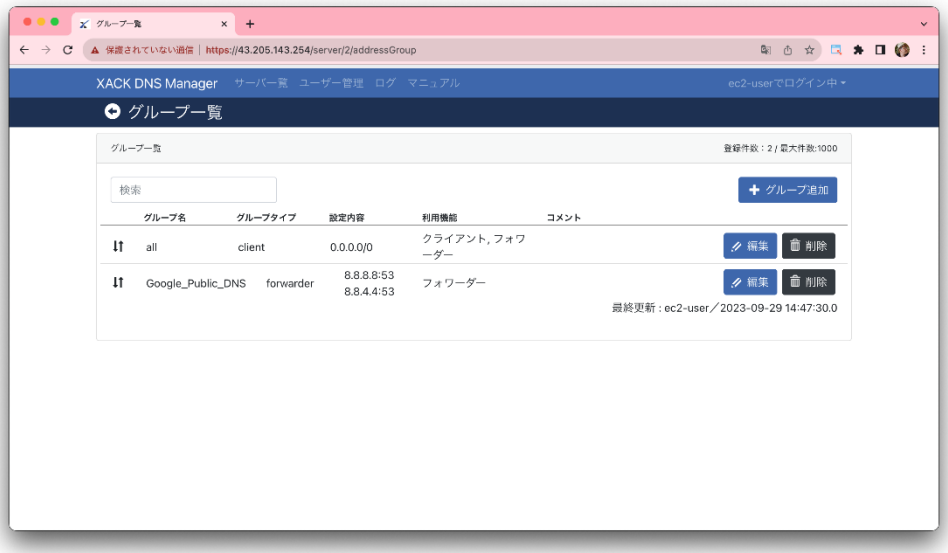


On the left are the features that are currently enabled. The DNS client function(“DNS クライアント機能”), cache server function(“キャッシュサーバー機能”), and statistics function are enabled(“統計情報機能”).

Click the [←] button on the left side of "基本設定編集" to return to the “DNS サーバー一覧” screen.



Press the [グループ] button.

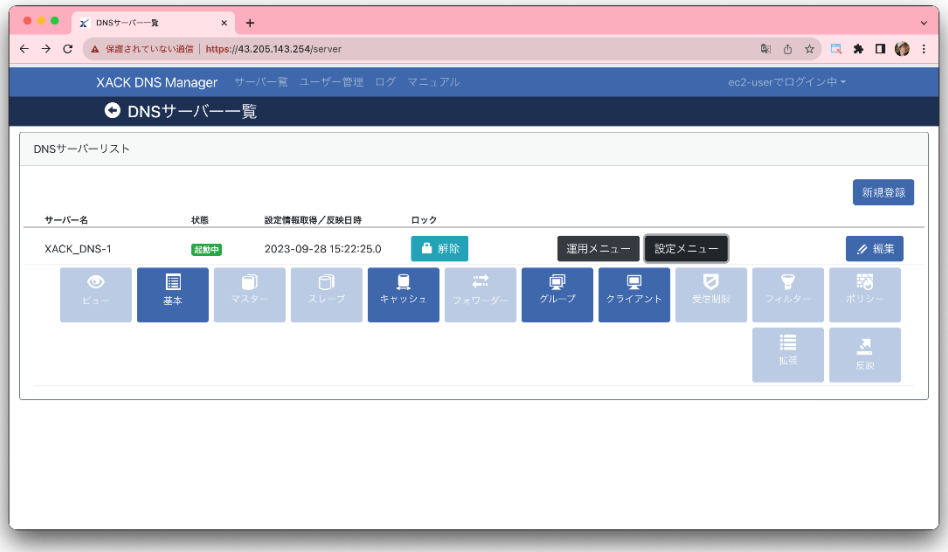


"all" and "Google_Public_DNS" are registered as group names.

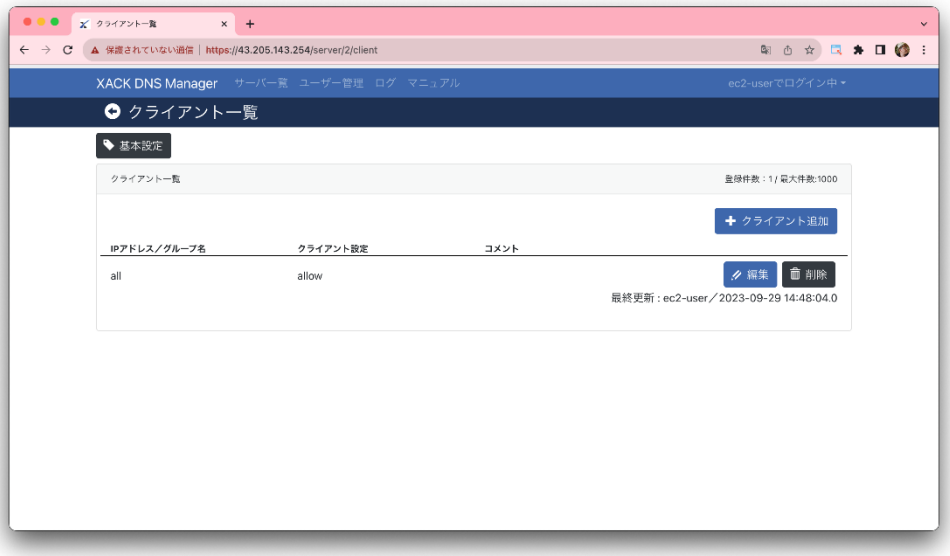
"all" defines the "client" of XACK DNS, and its content is "0.0.0.0/0". It is used in the client function(“クライアント”) and the forwarder function(“フォワーダー”).

"Google_Public_DNS" defines the "forwarder" of XACK DNS, and its contents are " 8.8.8.8:53 and 8.8.4.4:53". It is used in the forwarder function.

Press the [←] button on the left side of the "グループ一覧" to return to the "DNS サーバー一覧" screen.

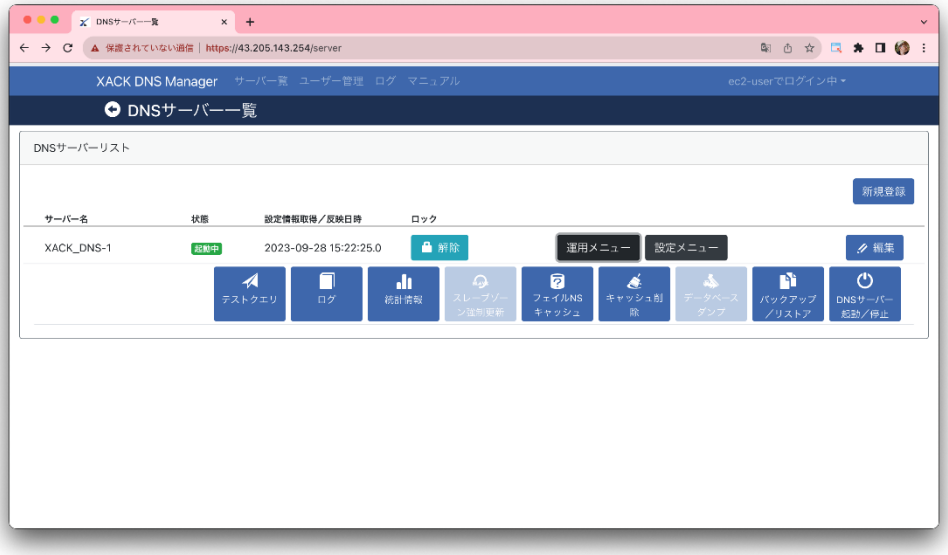


By pressing the [クライアント] button, you can see the settings of the client function.



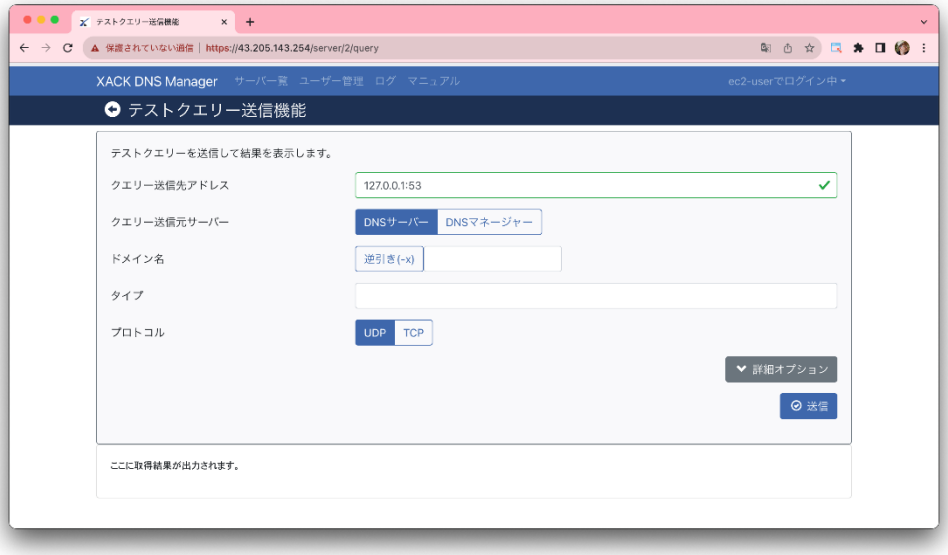
"all" is displayed in the “IP address/group name”(“IP アドレス/グループ名”) column, and "allow" is displayed in the “client settings”(“クライアント設定”). The former "all" is used by assigning the name "all" to the IP address 0.0.0.0/0 from the Group settings. The latter "allow" indicates what to do with the IP address of "IP address/group name", and allows communication with the corresponding client = "allow" is set.

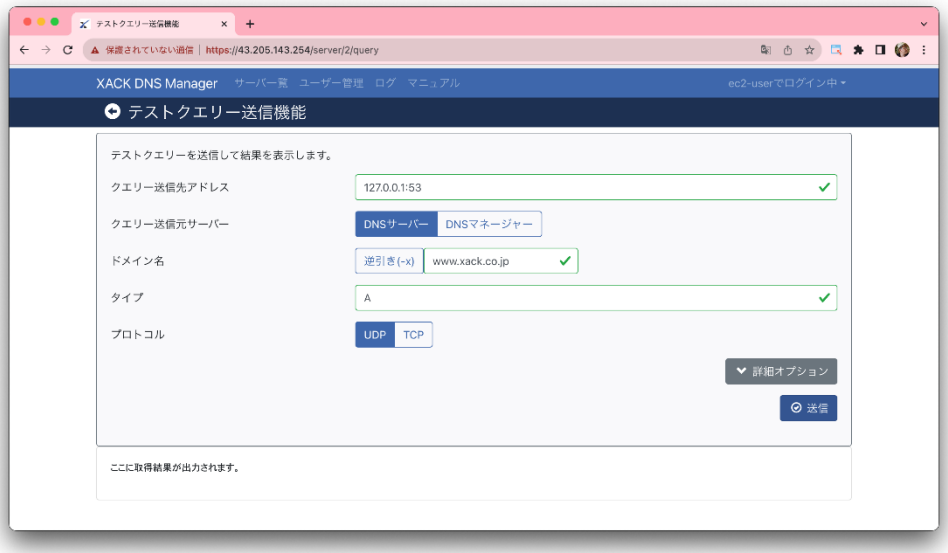
17. Let's try throwing a query.
Press the [運用メニュー] button to display the operation menu.



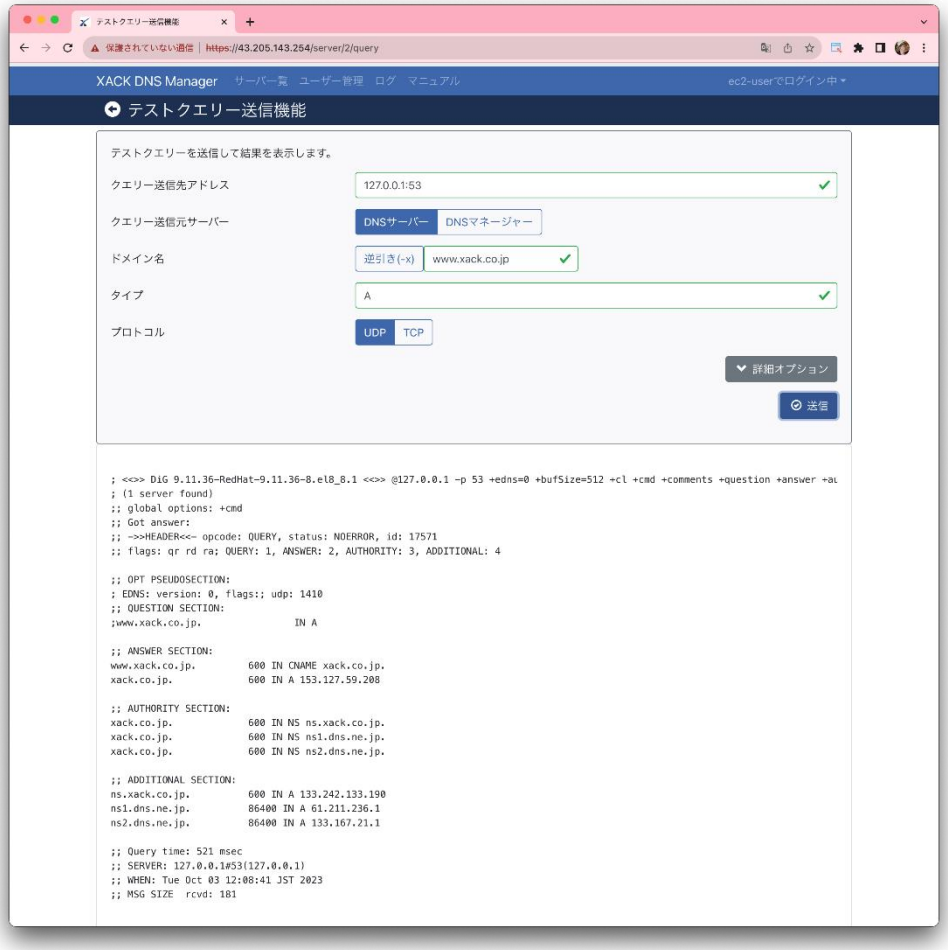
Click the [テストクエリ] button.

This is the screen for sending a test query.



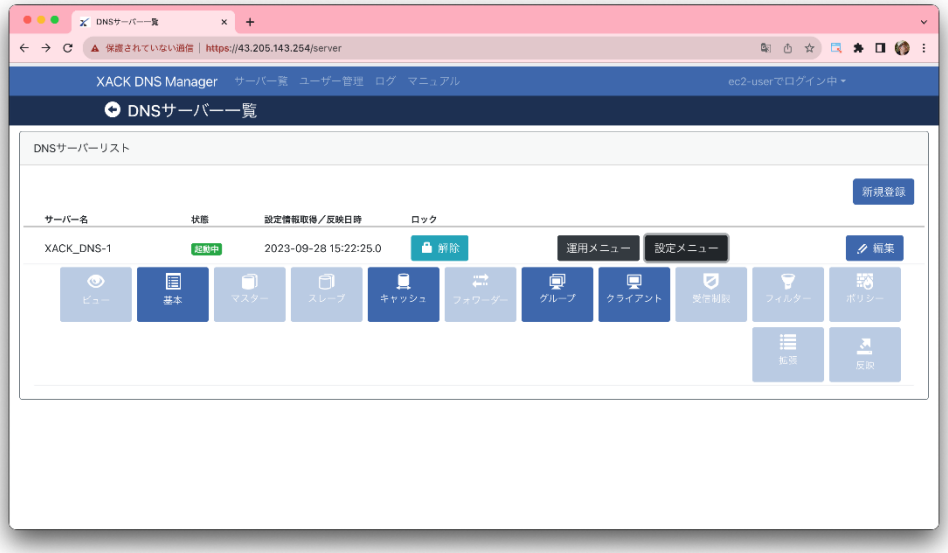


In the domain name field(“ドメイン名”), enter an appropriate domain name, and specify the type(“タイプ”), for example, "A".
Click the [送信] button to send the DNS query packet.

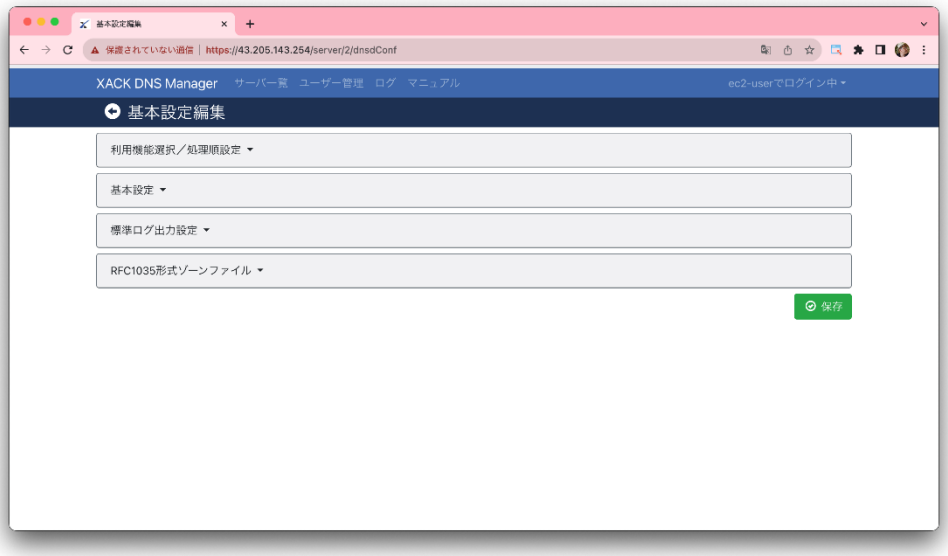


The results of sending the DNS query are printed below. If it doesn't fit on the screen, scroll to see it.

18. Change the XACK DNS set as the cache server to the authoritative name server.



From the DNS server list(“DNS サーバー一覧”) screen, press the [基本] button.

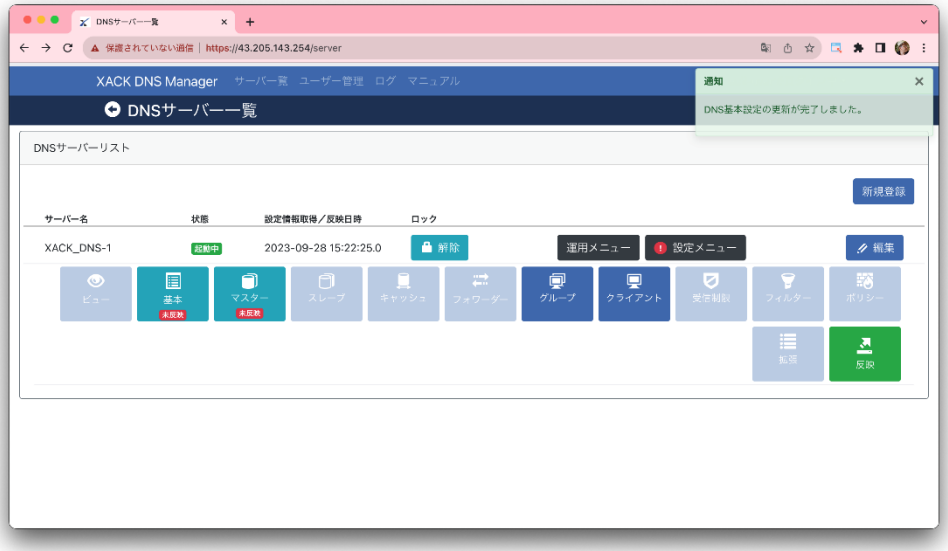


Press the [利用機能選択/処理順設定] button to open the tab.

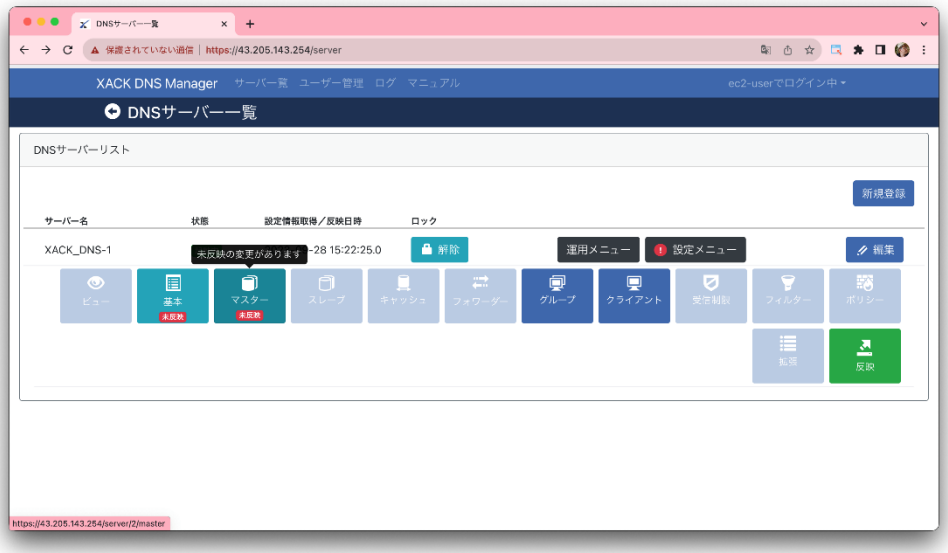
Drag and drop the [キャッシュサーバー機能] on the left to the right.

Next, drag and drop the [権威マスターサーバー機能] on the right to the left.

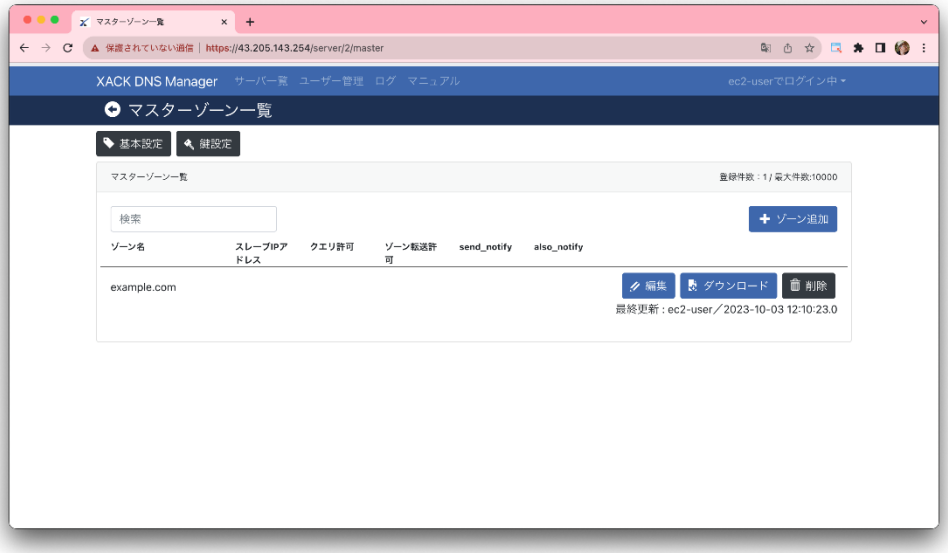
When you get to this screen, press the [保存] button to save the settings.



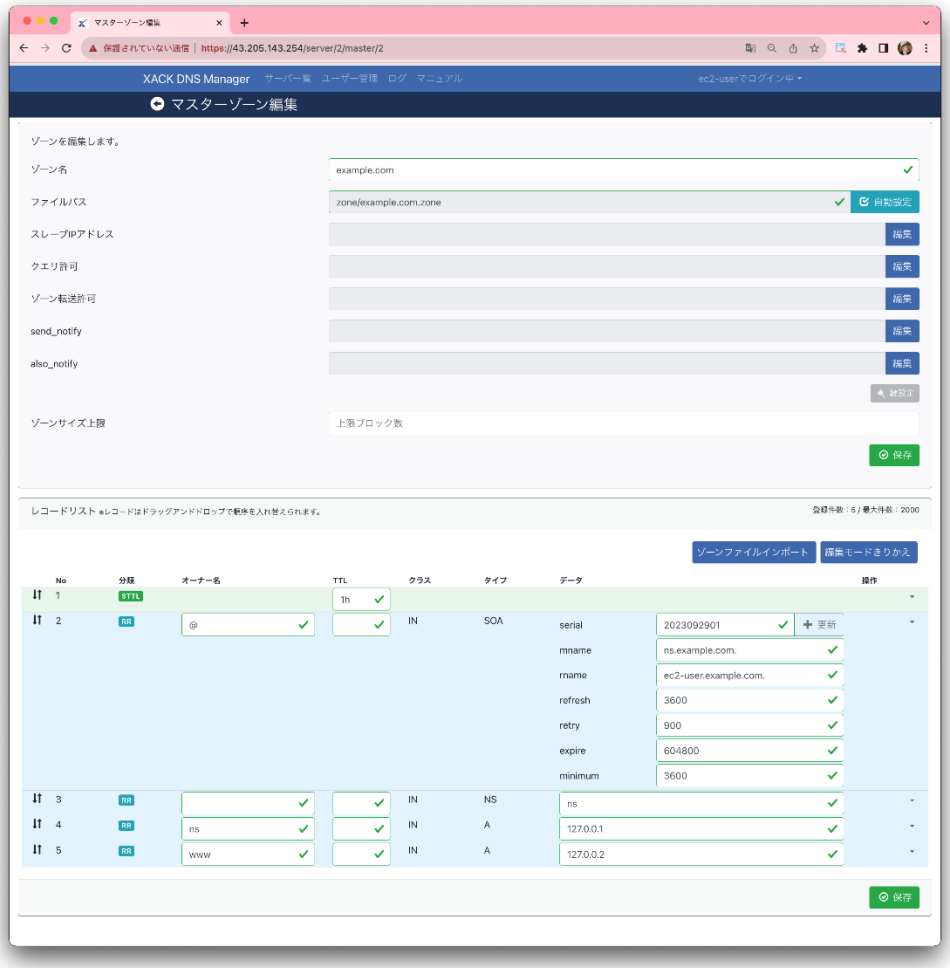
You will be returned to the DNS server list screen, where any functions that were affected by pressing the [保存] button earlier will be displayed in red as "未反映" indicating that the settings you just made have not been reflected on the DNS server. [基本] and [マスター] are not reflected. The current state is that the settings have been made on the GUI (XACK DNS Manager) side, but they have not been reflected in the DNS server (XACK DNS).



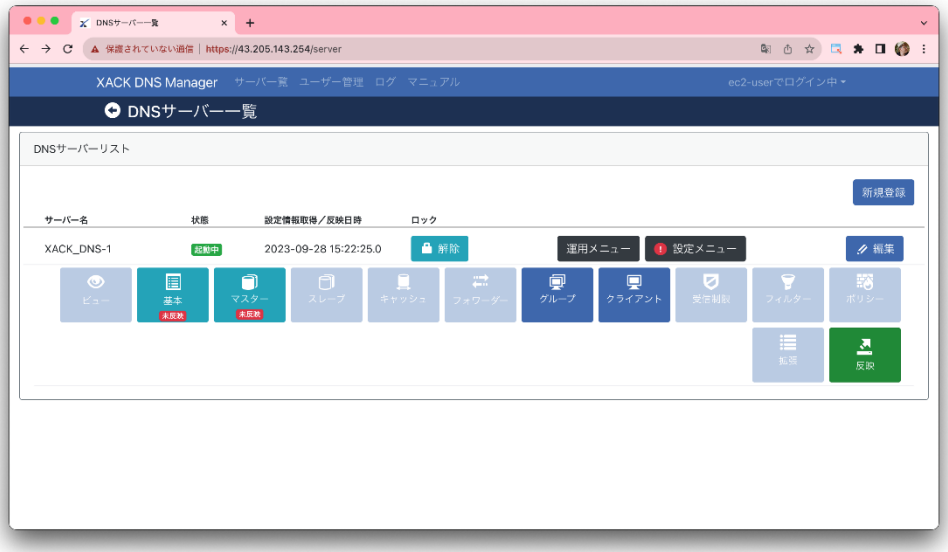
Press the [マスター] button to check the settings of the master zone.



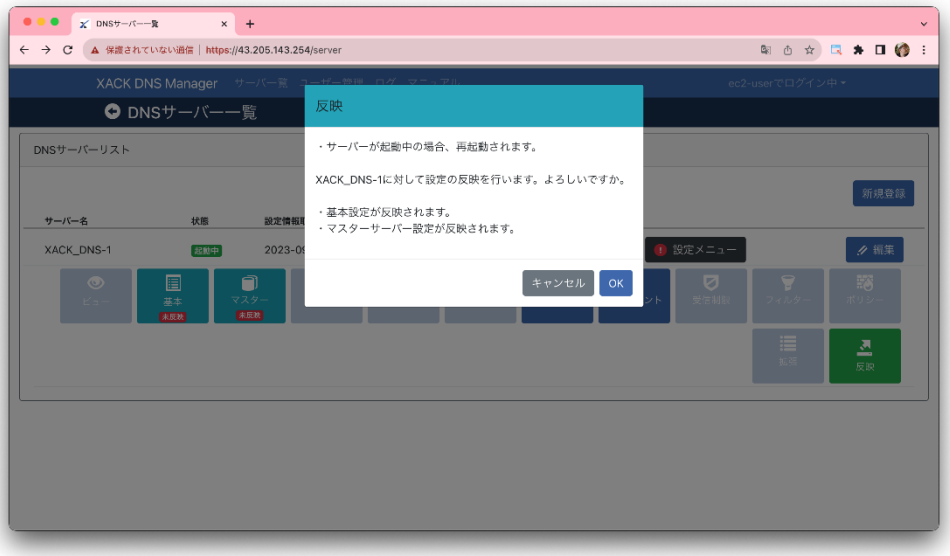
Currently, only example.com zones are registered.
By pressing the [編集] button, you can edit the details of the zone.



Since no editing is performed here, press the [←] button on the left side of "マスターゾーン編集" twice to return to the DNS server list(“DNS サーバー一覧”) screen.

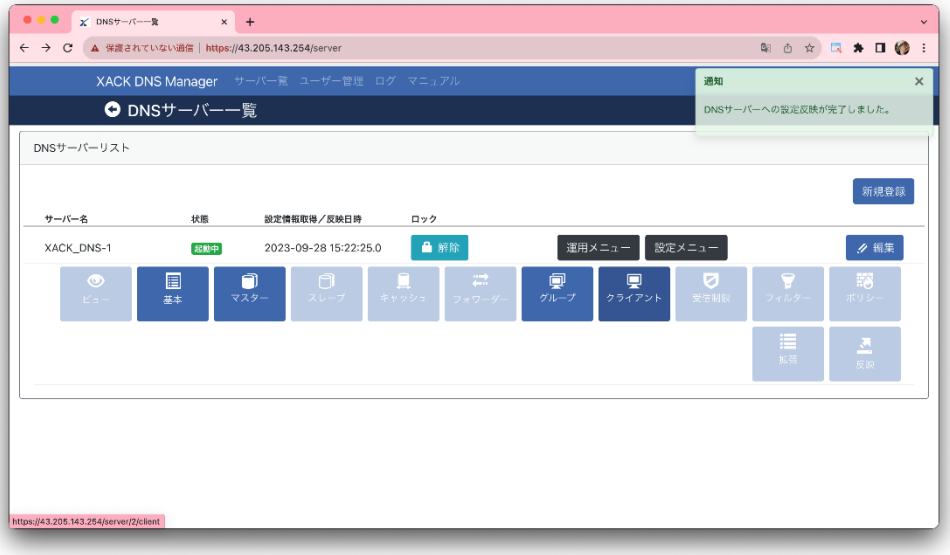


Click the [反映] button at the bottom right to reflect the settings to XACK DNS.

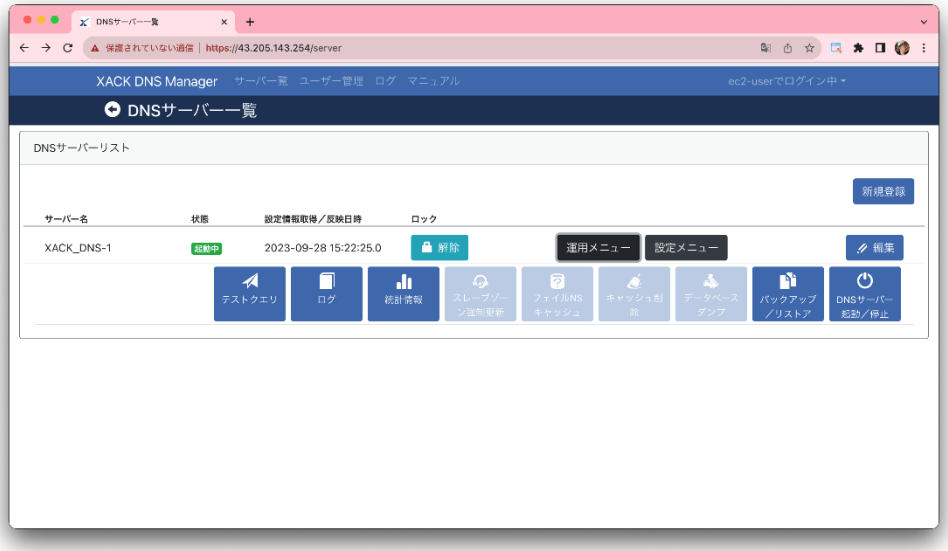


You will be warned to restart XACK DNS to reflect the settings, but press the [OK] button.

When the message " DNS サーバーへの設定反映が完了しました。" is displayed in the upper right corner, the settings are successfully reflected.

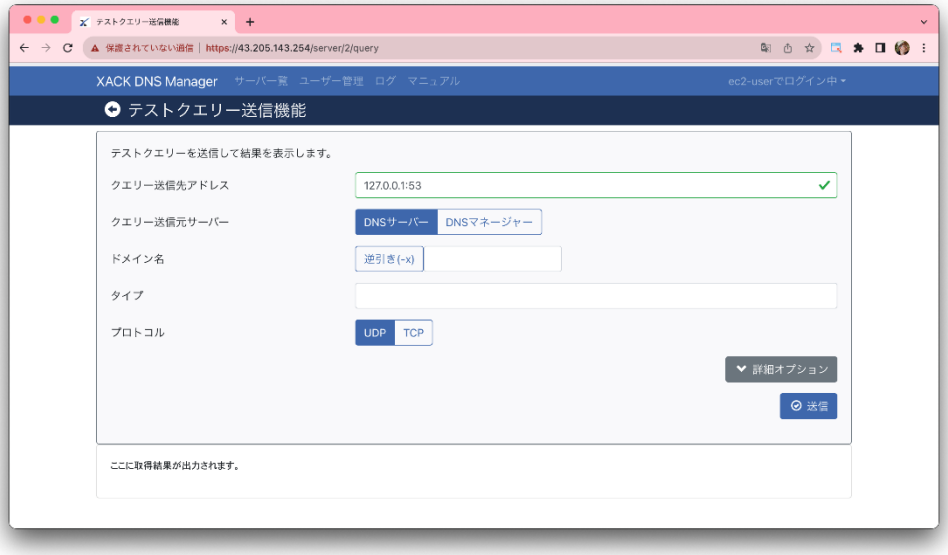


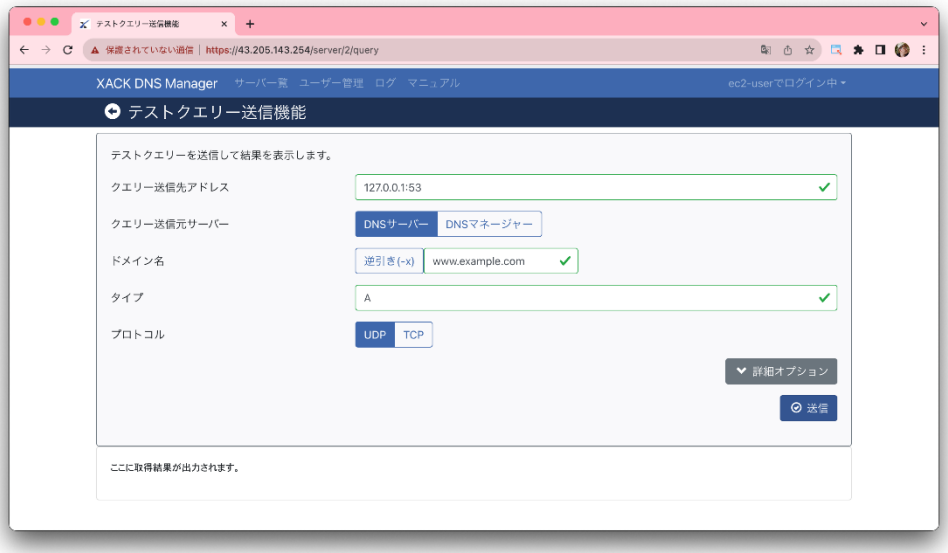
19. Let's also send a query to the authoritative name server.
Press the [運用メニュー] button to display the operation menu.



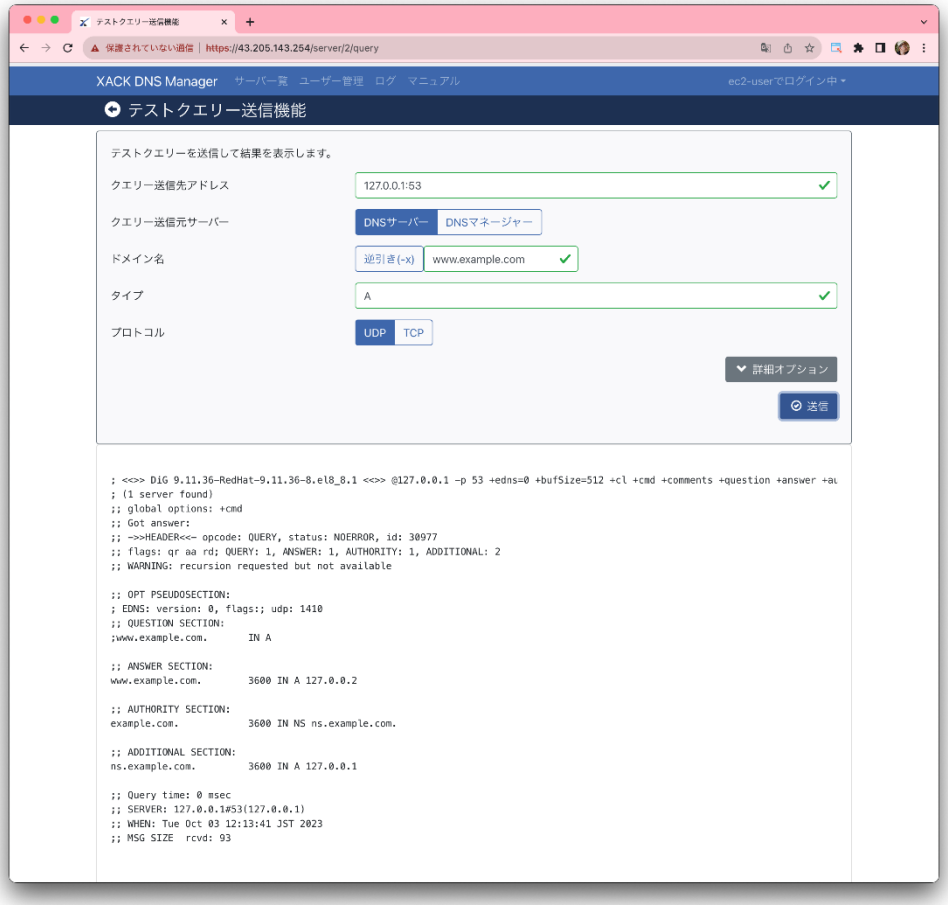
Click the [テストクエリ] button.

This is the screen for sending a test query.



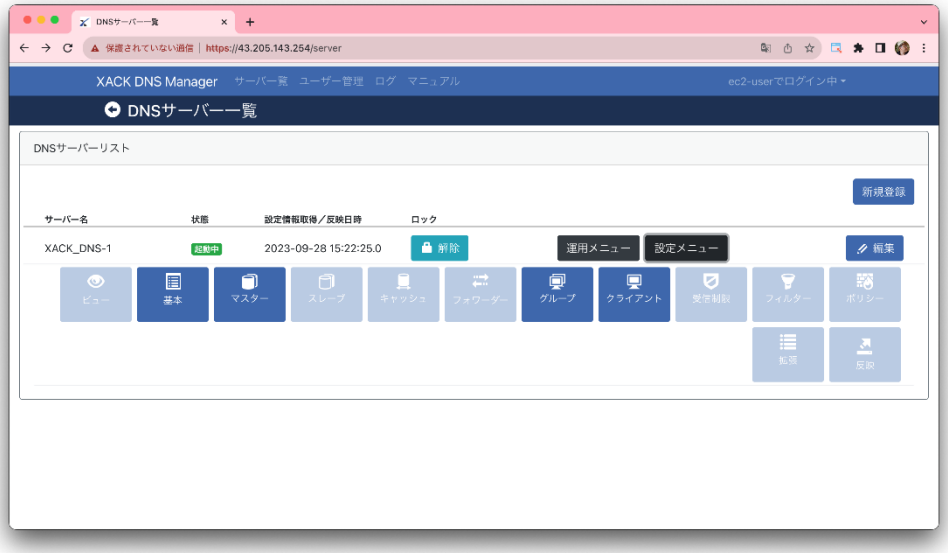


In the domain name(“ドメイン名”) field, write the domain name of the authoritative name server you just checked, and specify the type, for example, "A". Click the [送信] button.

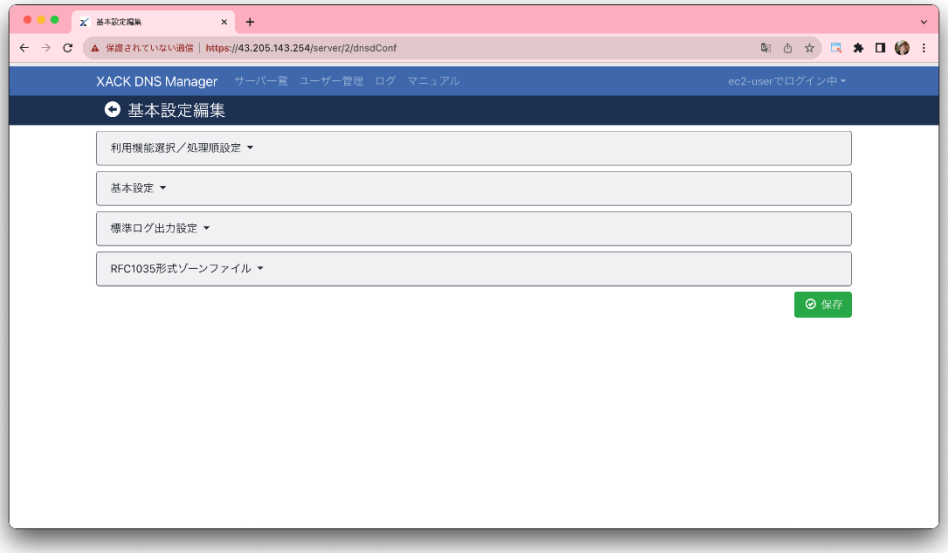


The results of sending the query are printed.

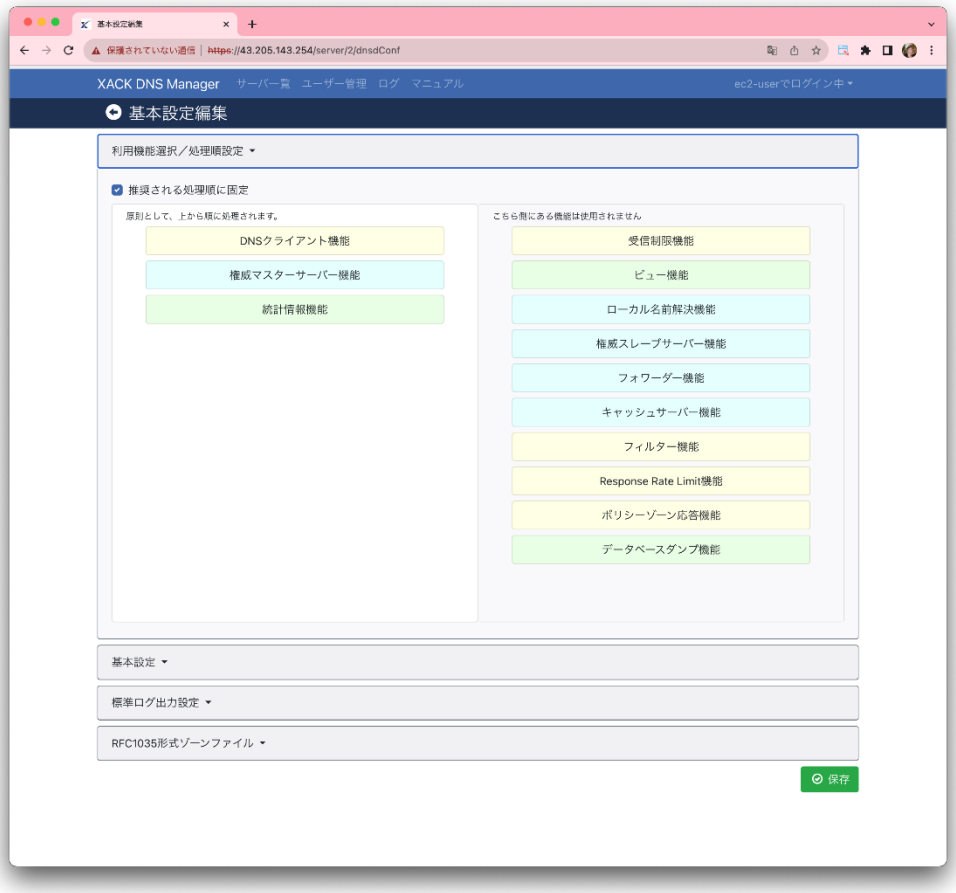
20. Switch to the forwarder:



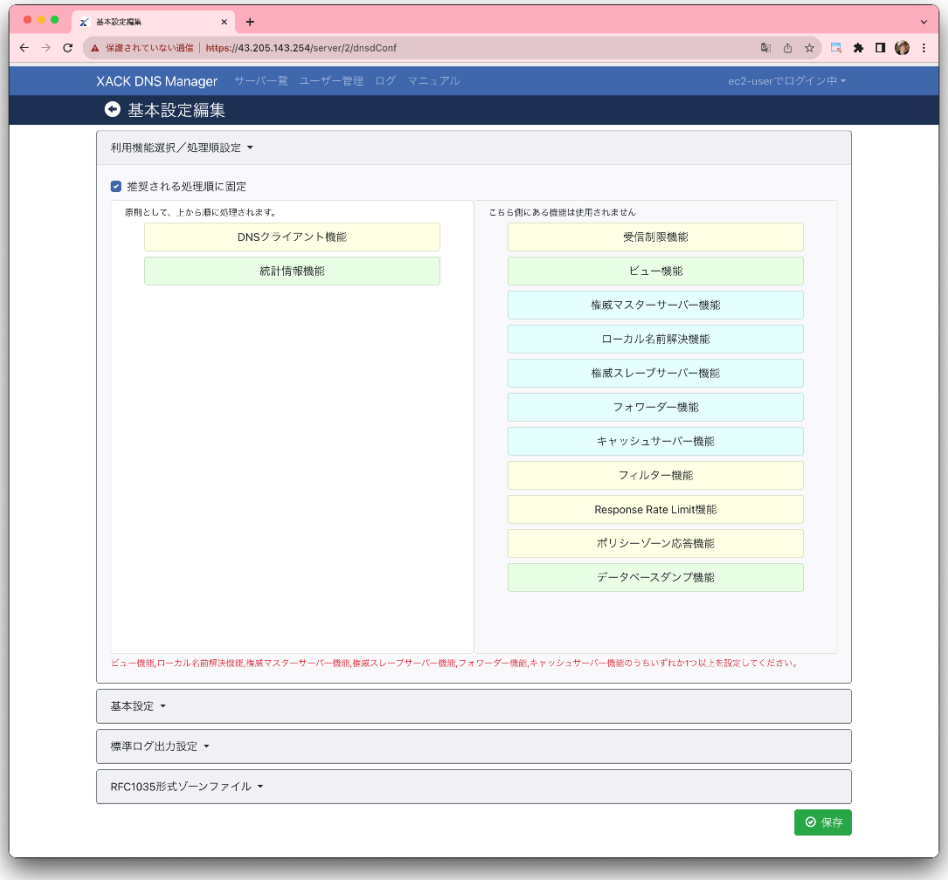
Click the [基本] button from the "DNS サーバー一覧" screen to move to the "基本設定編集" screen.



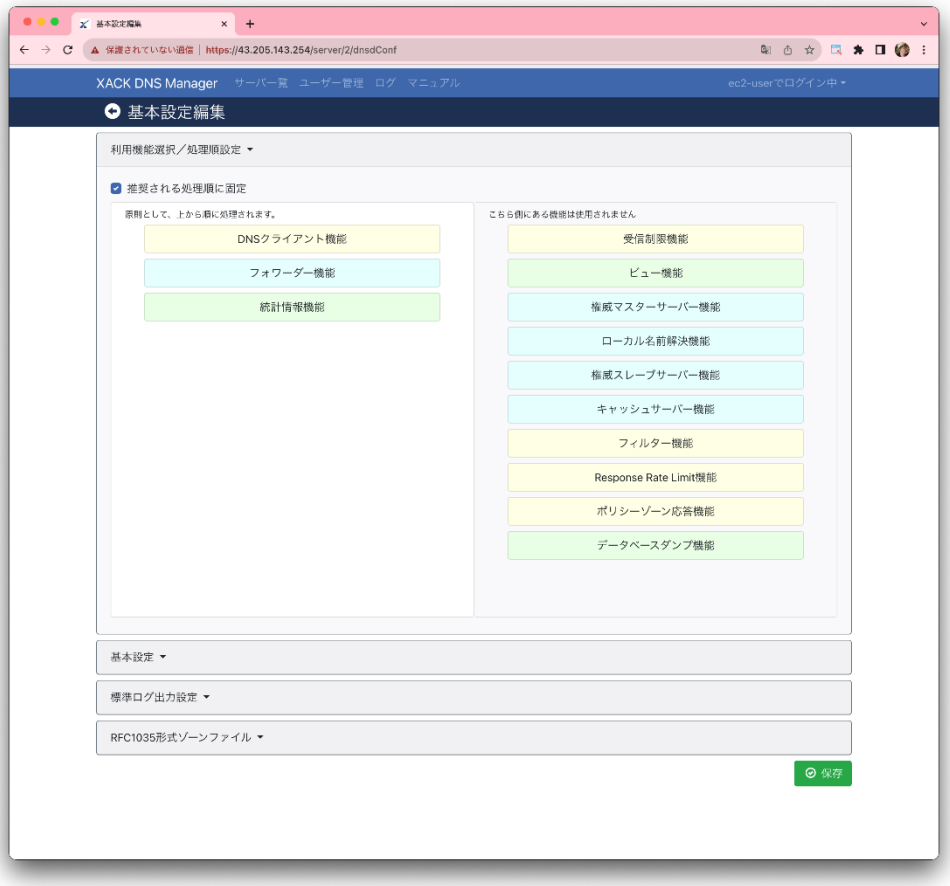
From here, click [利用機能選択／処理順設定].



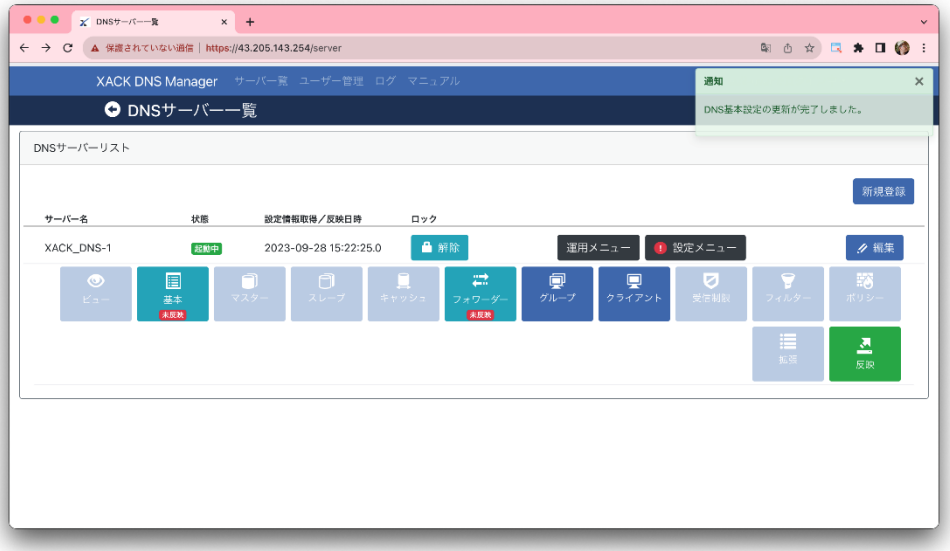
From the state where the authoritative name server is set, drag and drop the [権威マスターサーバー機能] on the left to the right side.



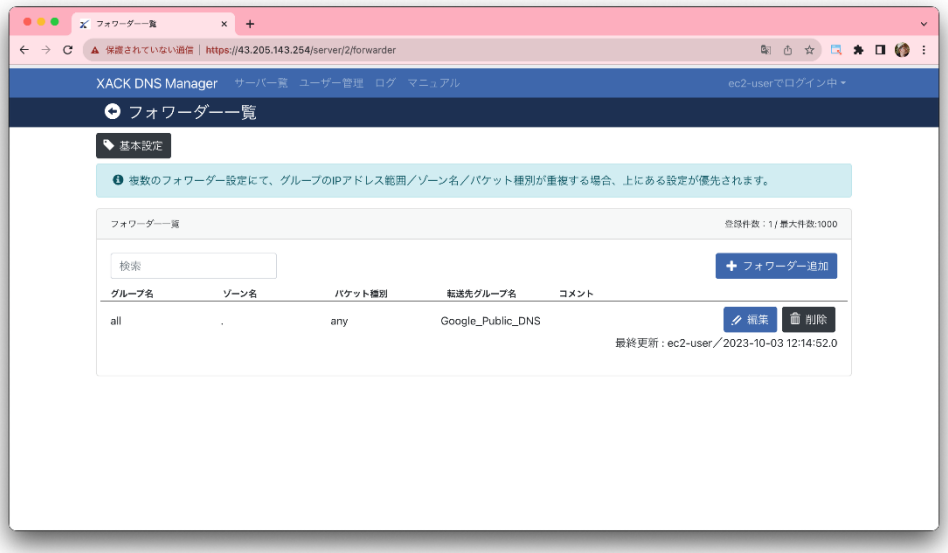
Drag and drop the [フォワーダー機能] on the right side to the left side.



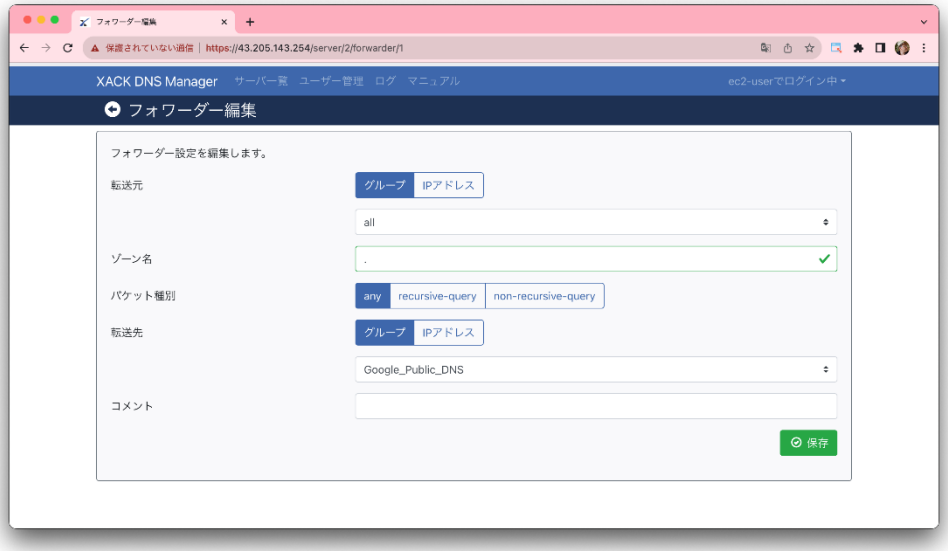
The forwarder function is set. Click the [保存] button to move to the "DNS サーバー一覧" screen.



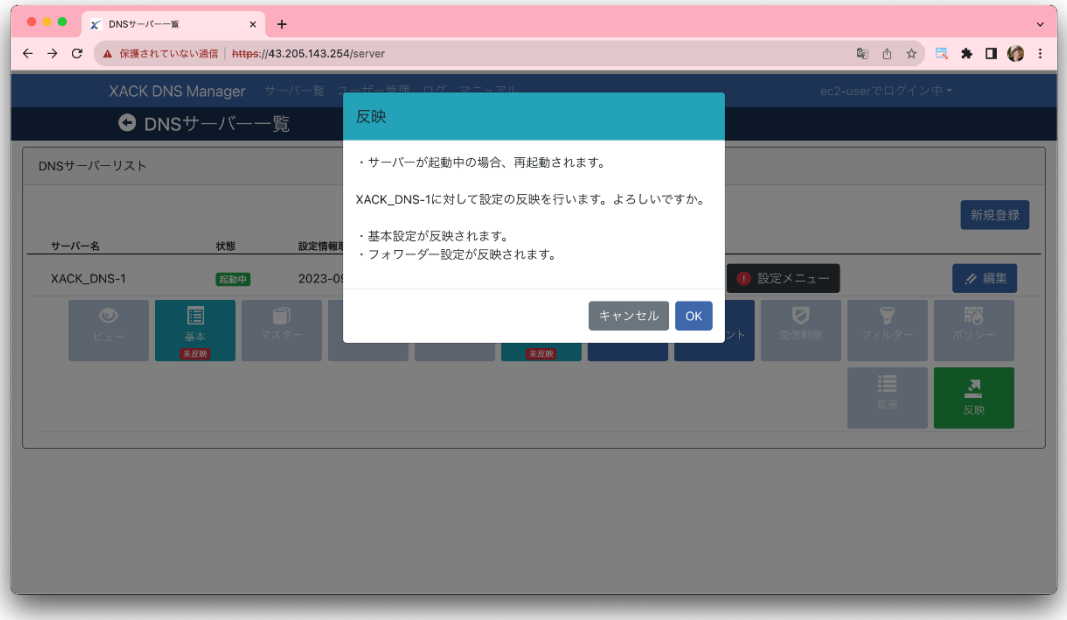
As with the authoritative name server settings, the affected part is "未反映". Press the [フォワーダー] button to confirm the forwarder setting.



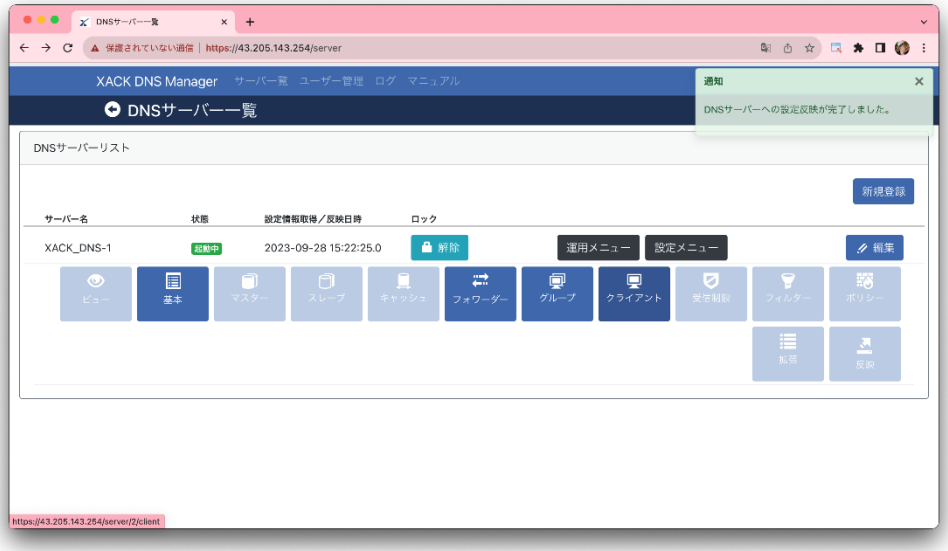
This is a list of forwarders.
Currently, there is only a forwarding setting to Google Public DNS.
You can see the details by pressing the [編集] button.



The current setting is
group name(“グループ名”): all ・・・ The group name set in the client function.
Zone Name(“ゾーン名”): "." ・・・ Any zone is eligible for forwards.
Packet type(“パケット種別”): "any" ・・・ Forward both recursive queries and iterative queries.
Forwarding group name(“転送グループ名”): "Google_Public_DNS" ・・・ This is the name specified in "グループ" in the "設定メニュー". Google Public DNS 8.8.8.8:53 and 8.8.4.4:53 are configured.
It has become.



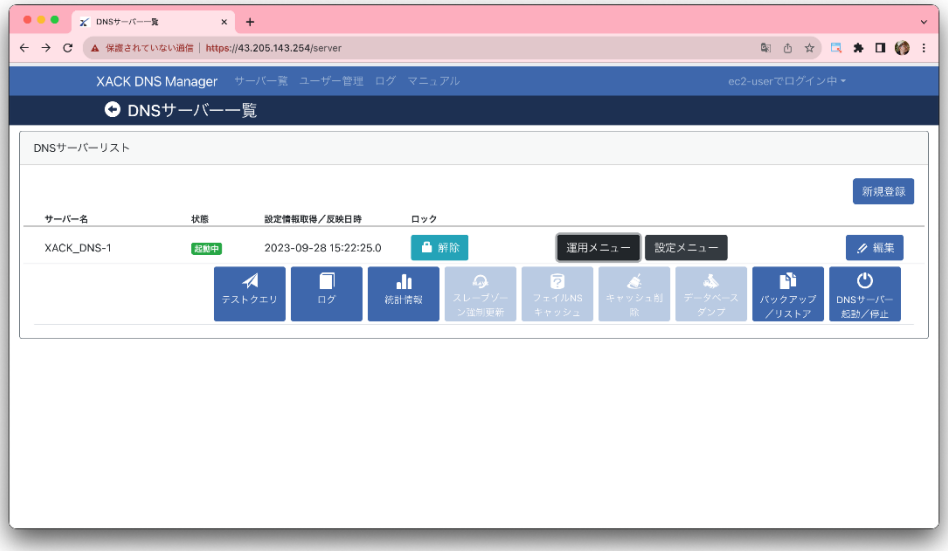
It is immediately after pressing the [反映] button at the bottom right of the "DNS サーバー一覧" screen.
The XACK DNS process will be restarted because of the rearrangement of the features used. Press the [OK] button.

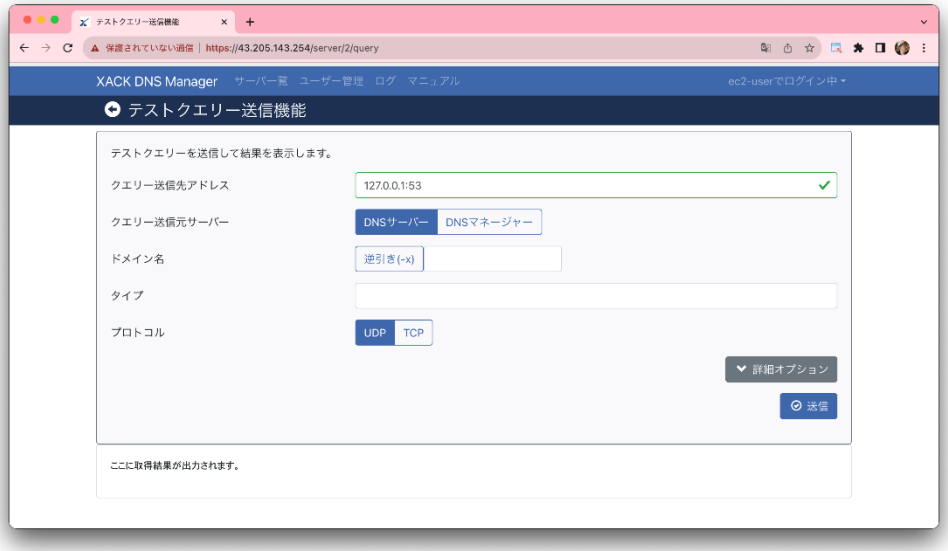


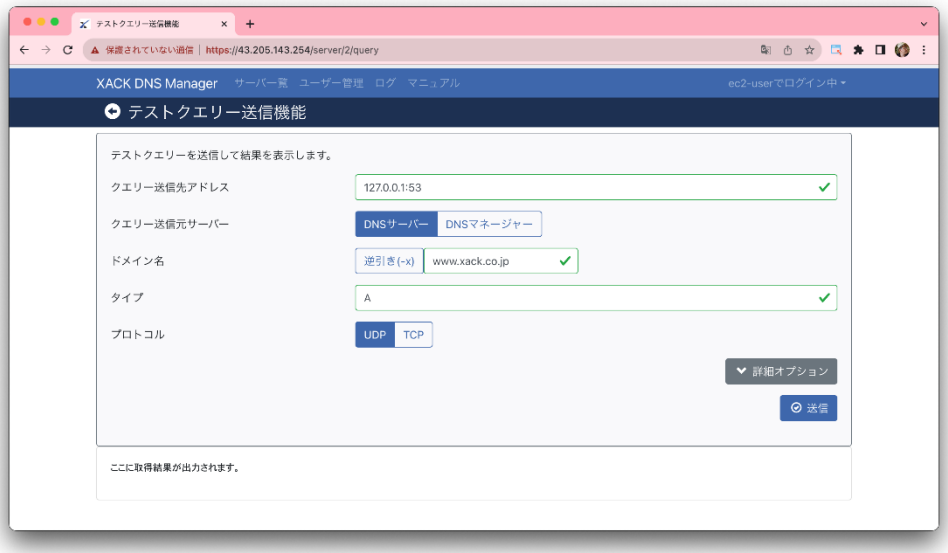
This is the screen after reflection and restart.

21. Let's try sending a query

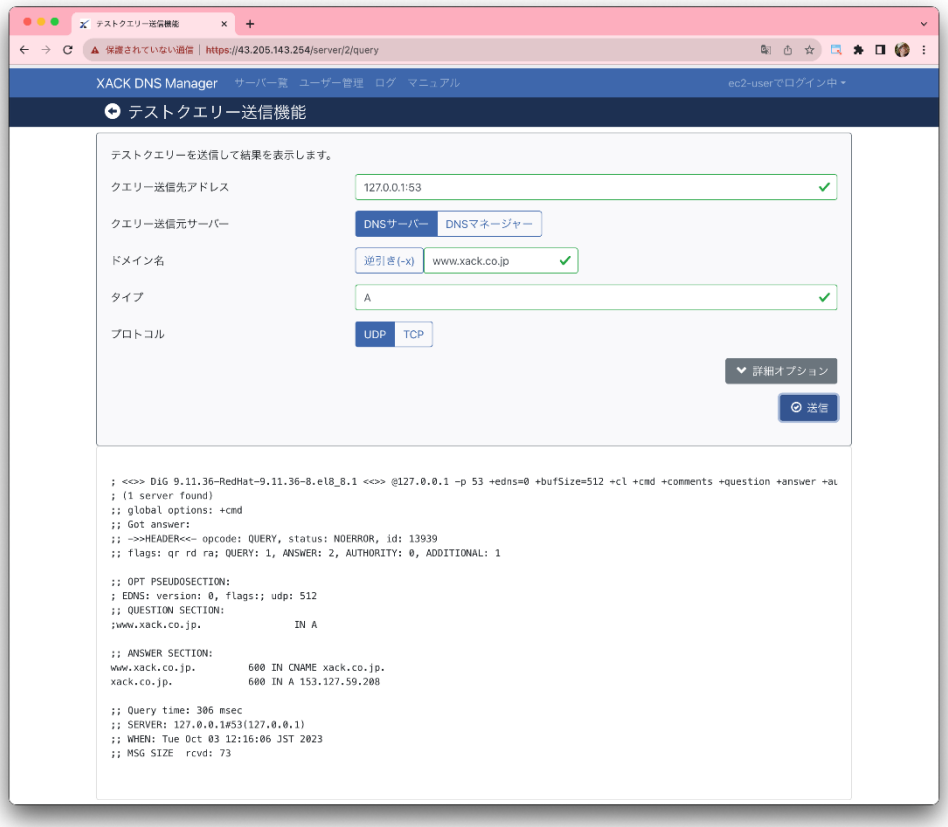
On the "DNS サーバー一覧" screen, press the [運用メニュー] button to display the operation menu, and then press the [テストクエリ] button.







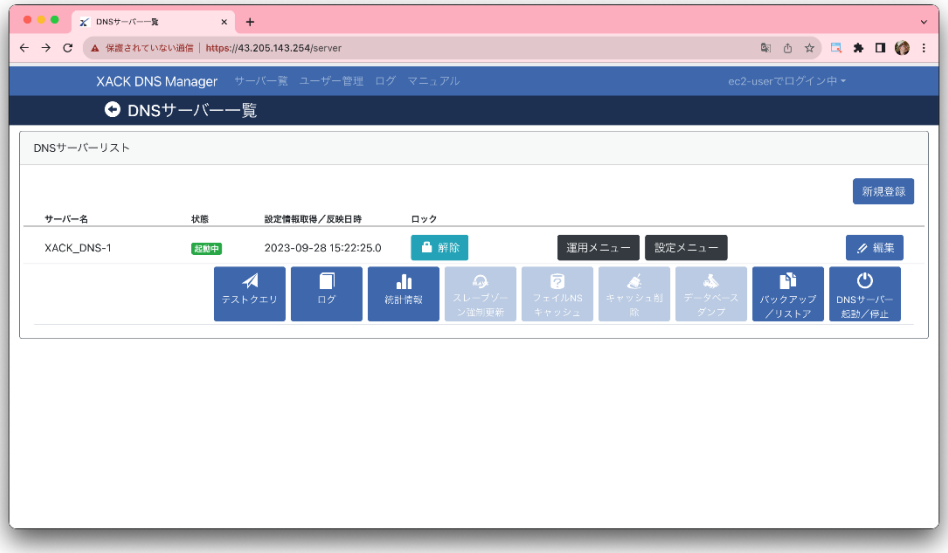
Try sending the contents with the same contents as the cache server function (domain name = "www.xack.co.jp", type = "A").



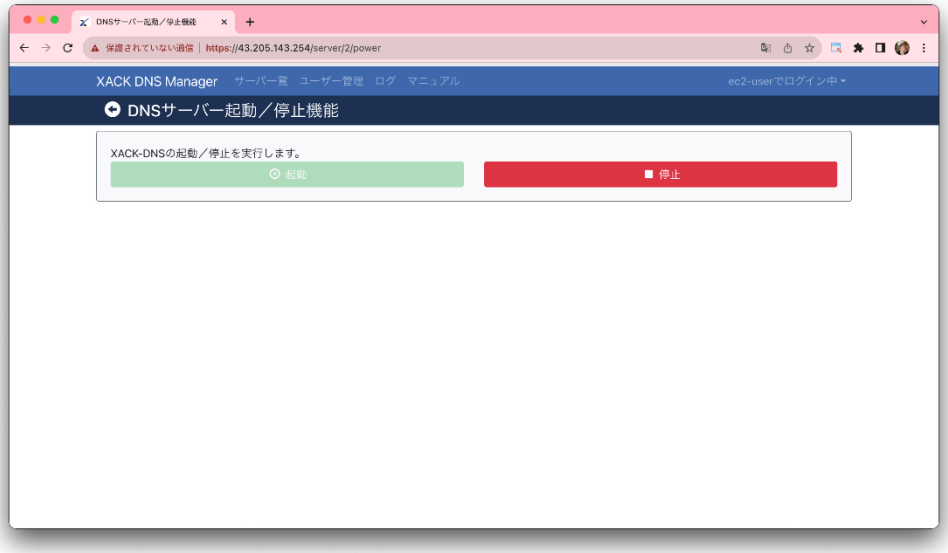
You can see that the response content is a little different from the cache server function.

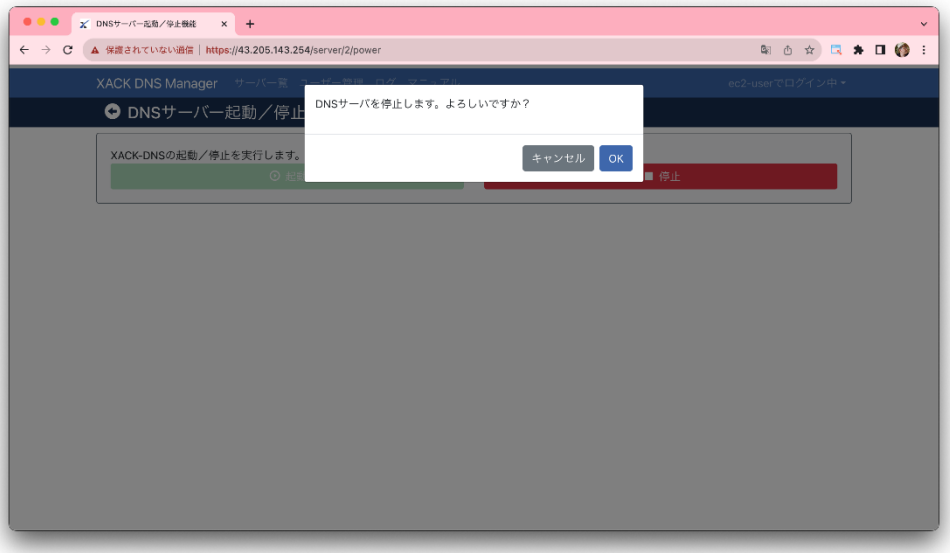
22. Stop

From the operation menu on the "DNS サーバー一覧" screen, press the "DNS サーバー起動/停止" button.

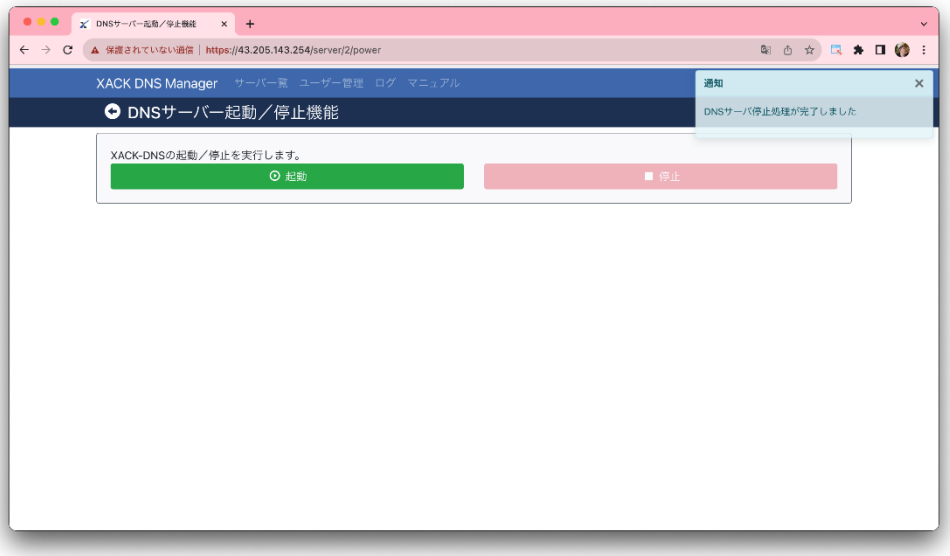


Press the [停止] button.

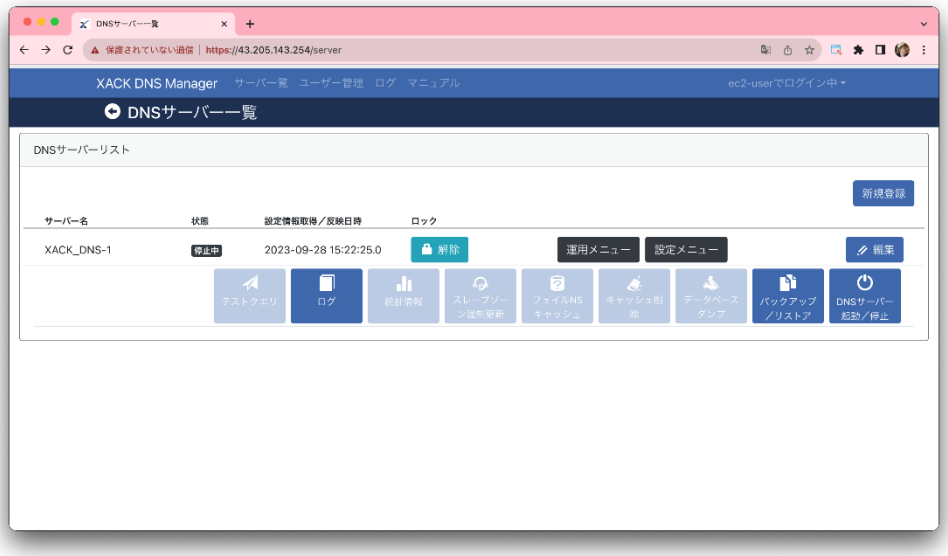




When the stop confirmation pop-up window is displayed, press the [OK] button.

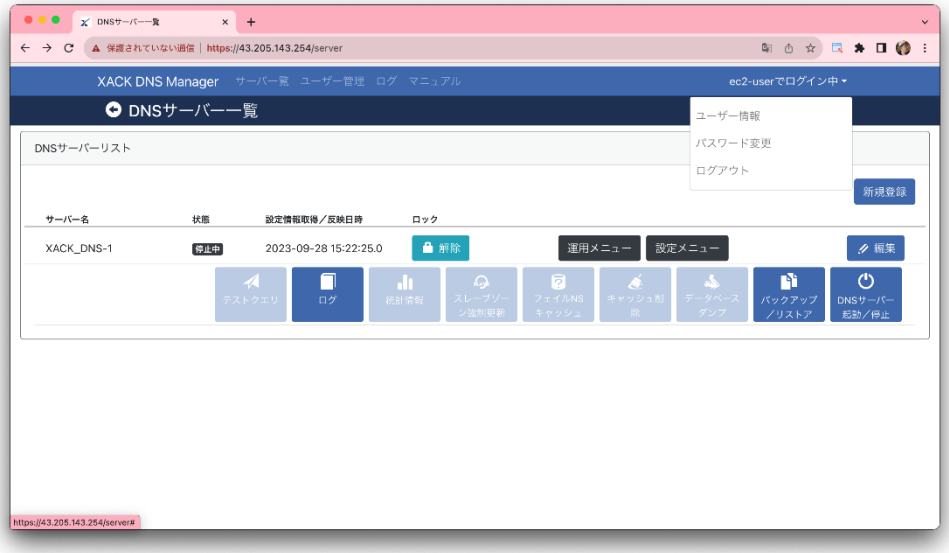


If it is successfully stopped, " DNS サーバ停止処理が完了しました" will be displayed in the upper right corner.
Press the [←] button on the left side of "DNS サーバー起動／停止機能" to display the "DNS サーバー一覧" screen.

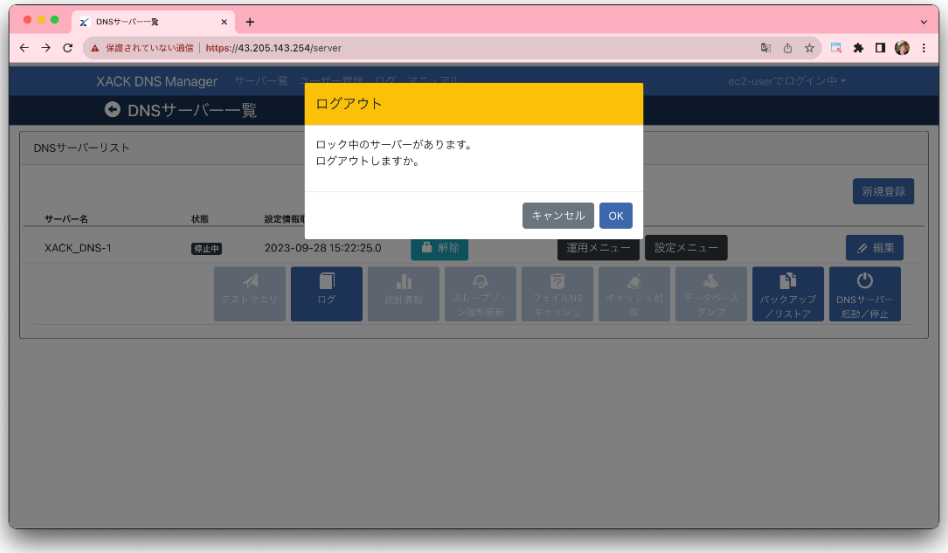


The status has changed to Stopped("停止中").

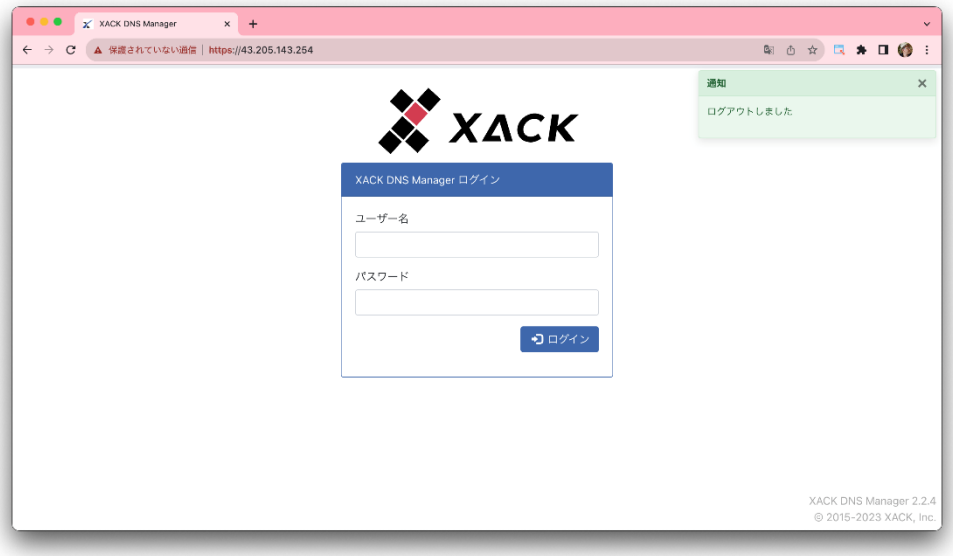
23. Logout



Press the [ec2-user でログイン中] button in the upper right corner, and then press the [ログアウト] button.



A warning will be displayed, but ignore it and press the [OK] button.



I was able to log out safely.

[Reference] https://docs.aws.amazon.com/ja_jp/AWSEC2/latest/UserGuide/ec2-launch-instance-wizard.html#liw-quickly-launch-instance

◆ License Extension

Contact the above mentioned contact information and obtain the license file. The obtained license file will be installed in step 14 of the installation procedure.

◆ Upgrade

The upgrade will be performed by sending the upgrade RPM file to the customer who has installed the software. The customer can then transfer the file to the instance using the scp command, etc., and enter the following command:

dnf install -y RPM file

When upgrading, there is no need to back up data.

◆ Precautions

When upgrading the OS, use only the following command to address vulnerabilities. If you perform a normal upgrade, bug fixes or feature enhancements may be installed, which may result in unexpected behavior.

dnf update --security

◆ Inquiries

➢ Technical inquiries such as functions, specifications, and operations

support@xack.co.jp

- Sales inquiries such as prices, evaluation period extensions, transaction conditions, etc.

  promotion@xack.co.jp

* Thank you for your cooperation in the questionnaire.
https://docs.google.com/forms/d/e/1FAIpQLSdlicTW0tvy3YMrkJkzW4CnAL3sRrR69ophTxs5TSlOG1ubQQ/viewform?usp=sf_link