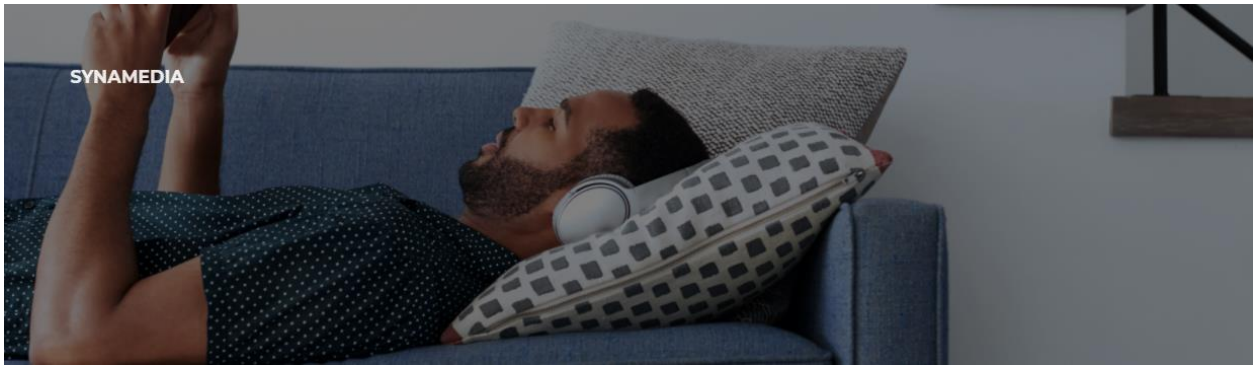
**Synamedia**




# Quick Start Manual vDCM.info 2.0

## Instruction Guidelines based on Use Cases

**Synamedia**

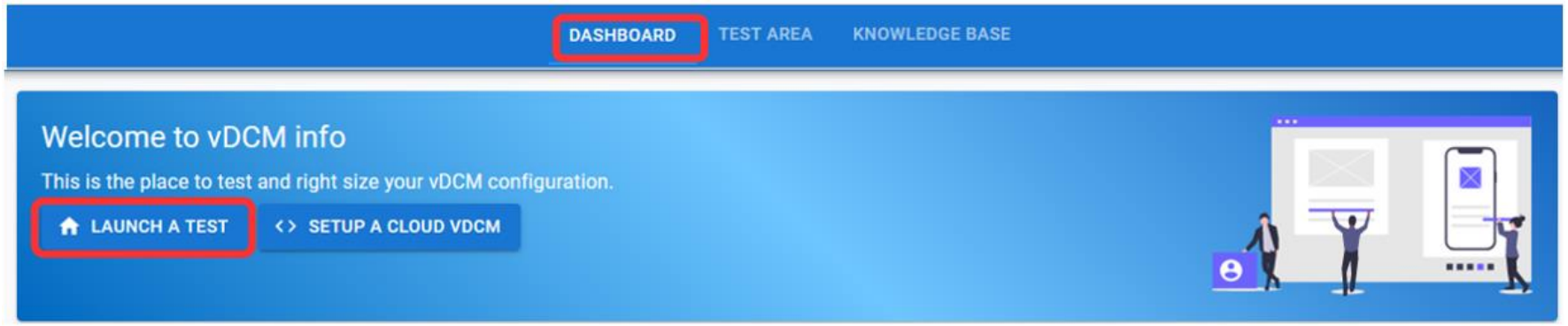
# Quick Start Table of Content

# Setting up Premium Transcode Test using the UI menu

The use case used for illustration:

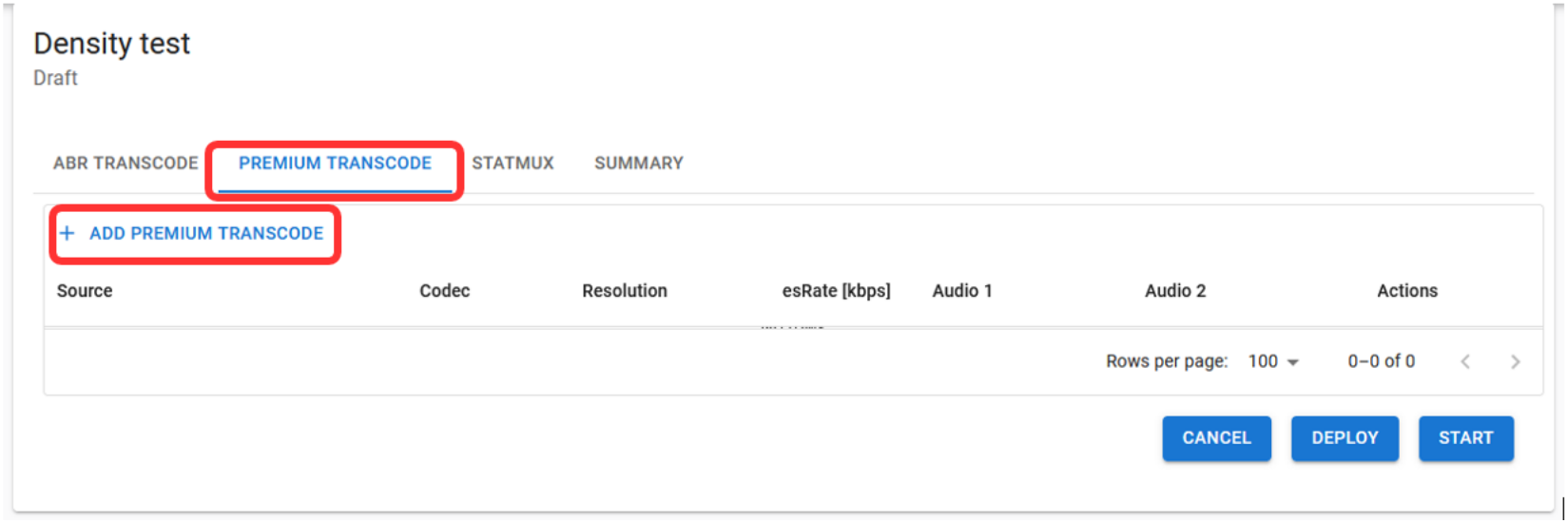
- Input: Chroma 4:2:0 8b, Resolution 1080p50
- Output: premium transcode with AVC codec, FHD, 5Mbps and with 2 audio channels Dolby Digital Plus

Step 1: Navigate from the dashboard to the tab(s) where you can define the configuration using the “LAUNCH A TEST” button.

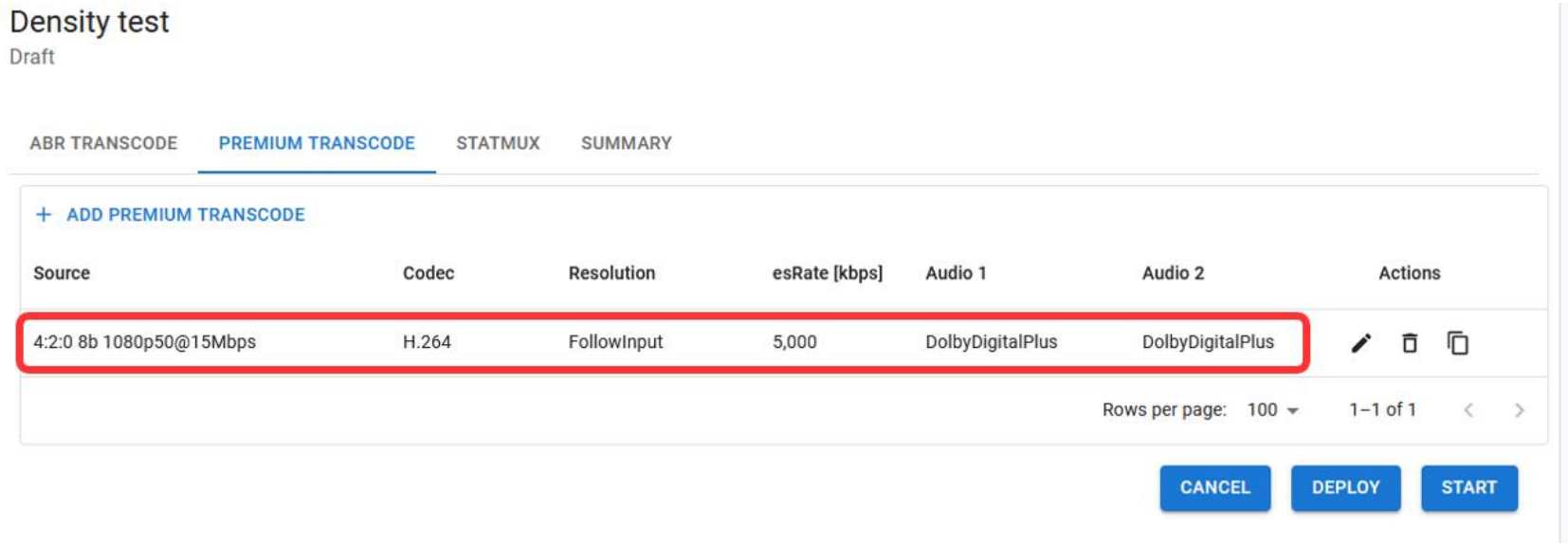



This will create a test record in “DRAFT” mode. Any test record can be any combination of an ABR ladder, (multiple) Premium transcodes and/or a statmux configuration. In this use case, a single premium transcode configuration is tested.

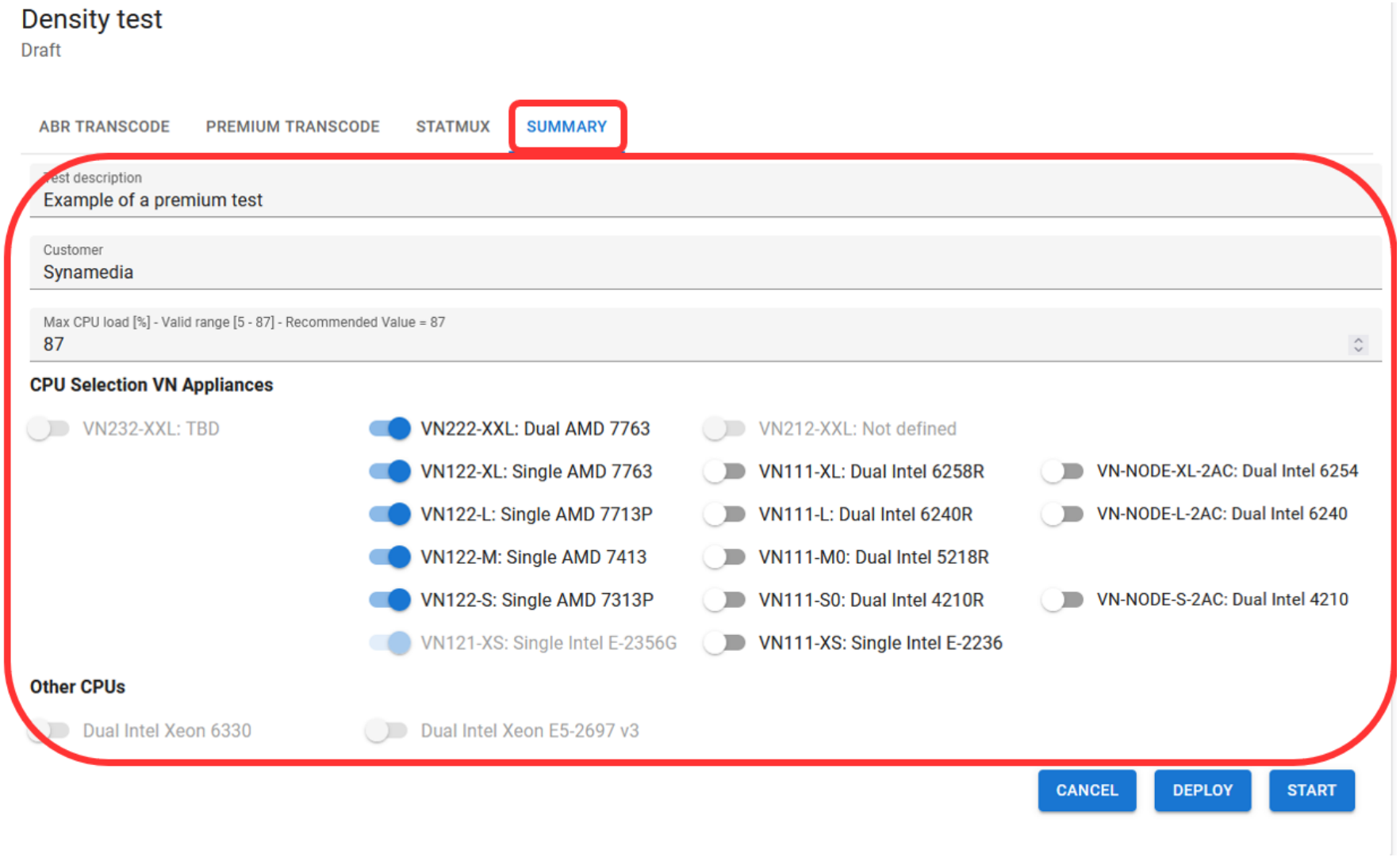
Step 2: Select the “PREMIUM TRANSCODE” tab and add an entry by clicking on the “+ ADD PREMIUM TRANSCODE” option.



Step 3: Modify the parameters according to your choice.



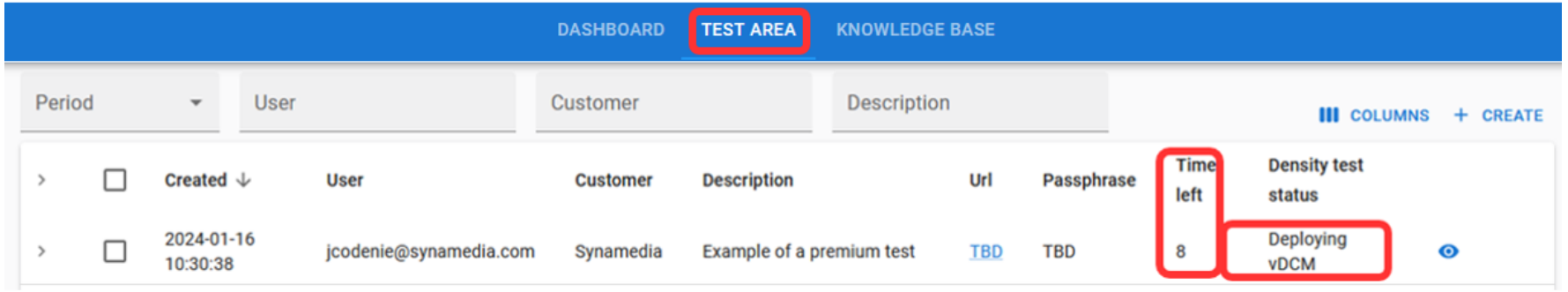
Step 4: Select the "SUMMARY" tab to complete general test parameters.



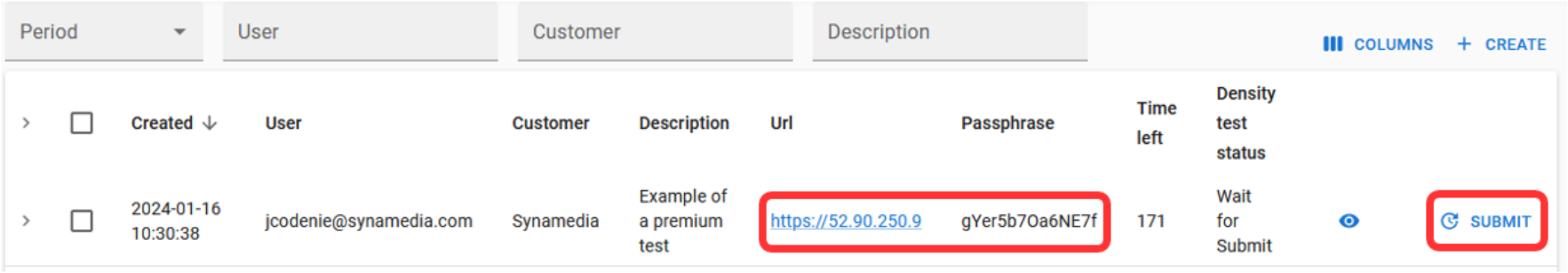
Step 5: Finally, in the test configuration, select either “CANCEL”, “DEPLOY”, “START” or navigate away from the page

According to the action you perform:

- If you navigate away from the page, your test configuration will be stored in the database in “DRAFT” mode. You can edit/delete it any other time to complete the testing.
- Clicking on “CANCEL”: Your test record in draft mode will be deleted from the database.
- Clicking on “START”: the test configuration will be submitted without the possibility of tweaking it and pushed to the processing queue. There is no need to perform a manual “SUBMIT” action.
    - Clicking on “DEPLOY”: Your test configuration will be deployed on a vDCM cloud instance. Before you actually submit the final test configuration, you can still tweak it on this cloud vDCM. The status can be tracked on the “TEST AREA” page.




    - It takes approximately 10 minutes until the configuration is deployed and the status changes to “Wait for Submit”
    - Use the URL and the Passphrase credentials to access the vDCM. The username is “Administrator”. You can now tweak the settings. When you are pleased with the settings, go back to vdcm.info and click the “SUBMIT” option. Your test will be pushed into the processing queue.



- Once test capacity is available, the test status will change to “Testing”.

| | Created ↓ | User | Customer | Description | vDCM Username Administrator | Passphrase | Time left | Density test status | |
|---|---|---|---|---|---|---|---|---|---|
| › | 2024-01-17 07:40:50 | jcodenie@synamedia.com | Synamedia | Example of a Statmux test | N/A | N/A | | Testing | |

- When the test is finished, the status will change to “Done”. Use the “expand” icon to see the test results and the “eye” icon to see details

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ⌄ | 2024-01-17 07:40:50 | jcodenie@synamedia.com | Synamedia | Example of a Statmux test | N/A | N/A | | Done | |

Test Results

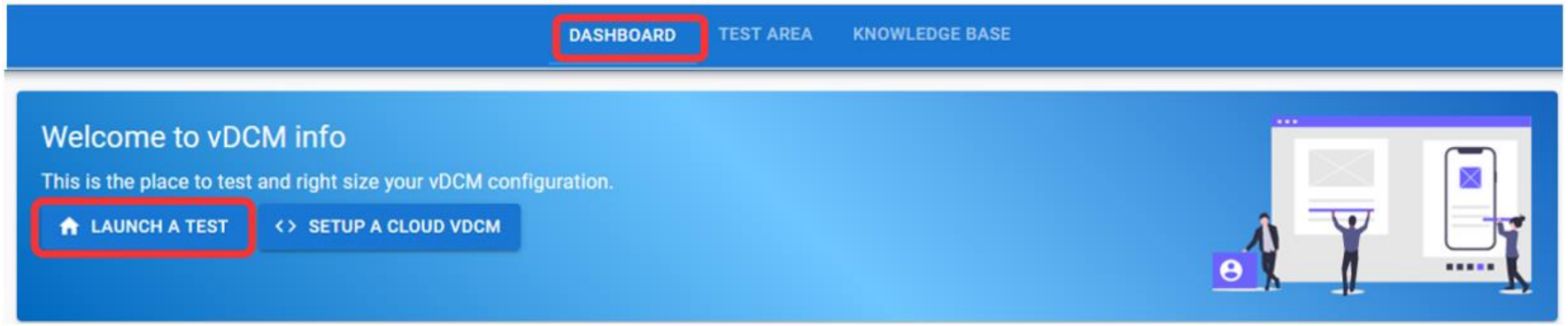
| Synamedia PID | CPU Architecture | OS Version | SW Version | Testing Density | Highest Pass | Lowest Fail |
|---|---|---|---|---|---|---|
| N/A | Dual_AMD_EPYC_9554_64-Core_Processor | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 4 | 5 |
| N/A | Dual_Intel_Xeon_Silver_4210_CPU_2.20GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 0 | 1 |
| N/A | Dual_Intel_Xeon_Gold_6240_CPU_2.60GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 0 | 1 |
| N/A | Dual_Intel_Xeon_Gold_6254_CPU_3.10GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 0 | 1 |

# Setting up an ABR Test using the UI menu

The use case used for illustration:

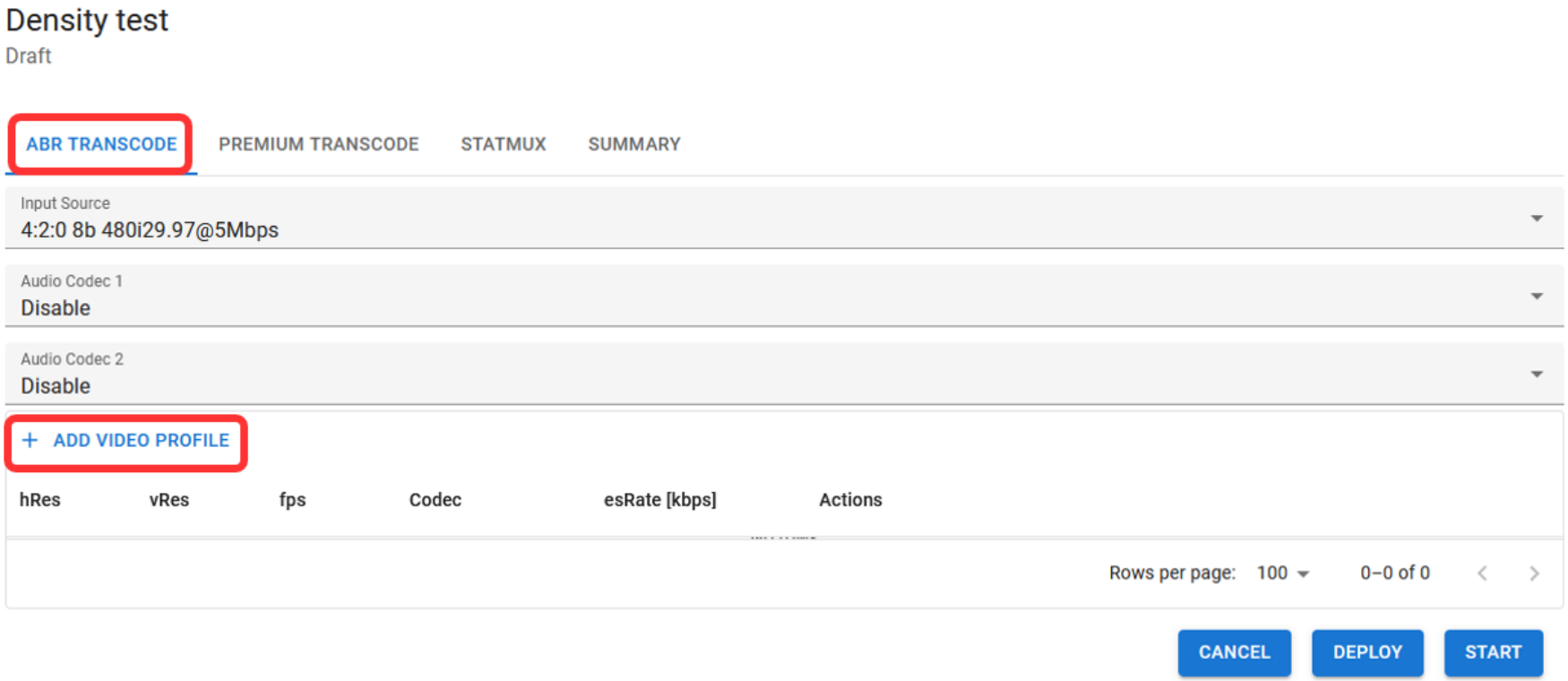
- Input: Chroma 4:2:0 8b, Resolution 1080p50
- Output: 3 profiles with codec H.264 with 2 audio channels Dolby Digital Plus per profile

Step 1: Navigate from the dashboard to the tab(s) where you can define the configuration using the “LAUNCH A TEST” button.

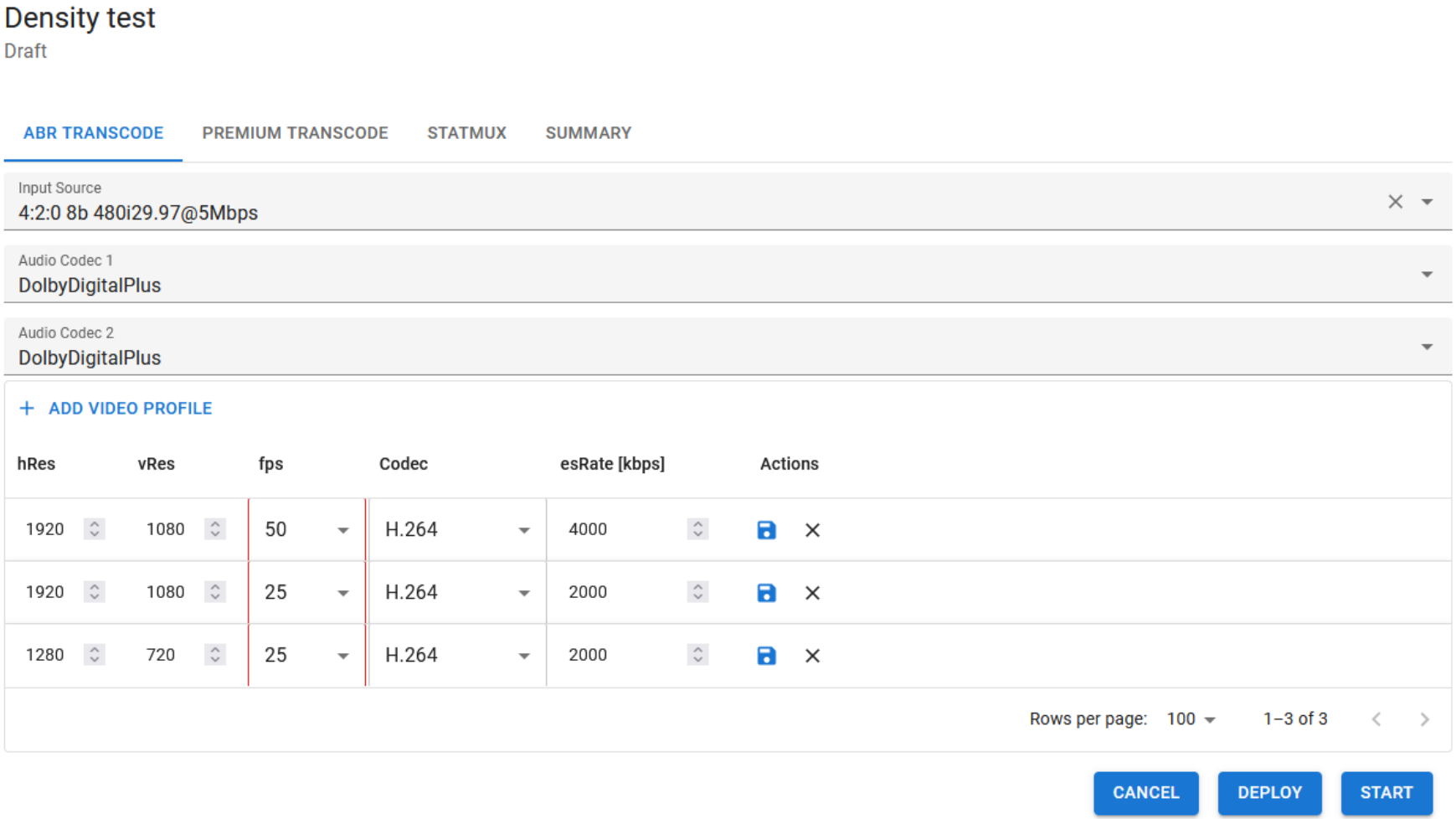



This will create a test record in “DRAFT” mode. Any test record can be any combination of an ABR ladder, (multiple) Premium transcodes and/or a statmux configuration. In this use case, an ABR transcode configuration is tested.

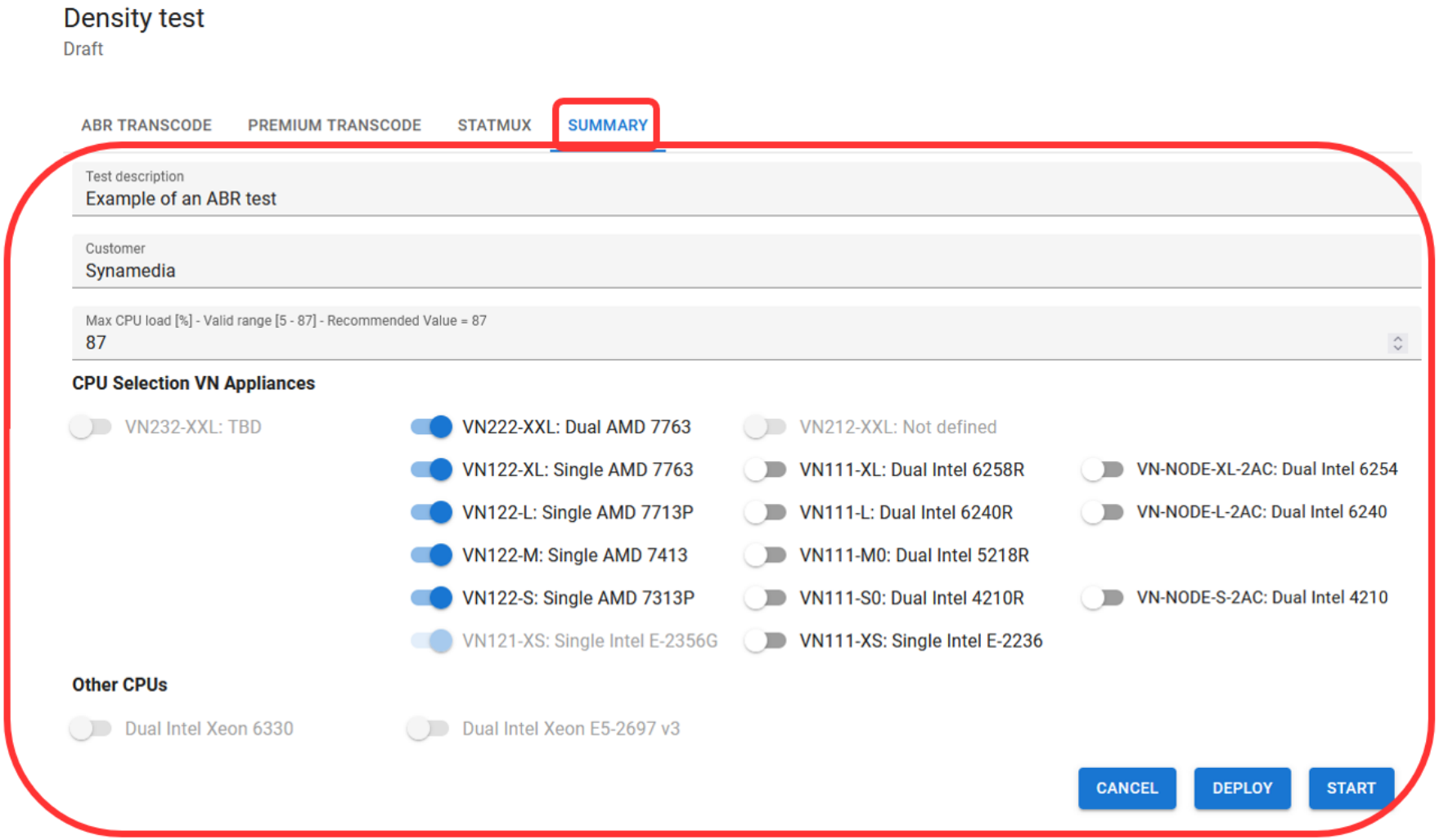
Step 2: Select the “ABR TRANSCODE” tab and add the profiles by clicking on the “+ ADD VIDEO PROFILE” option.



Step 3: Modify the parameters according to your choice.



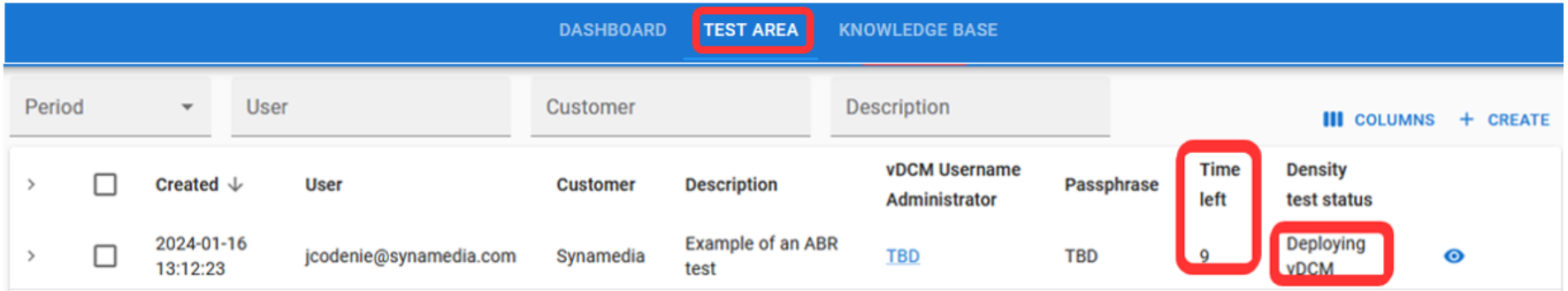
Step 4: Select the "SUMMARY" tab to complete general test parameters.



Step 5: Finally, in the test configuration, select either “CANCEL”, “DEPLOY”, “START” or navigate away from the page

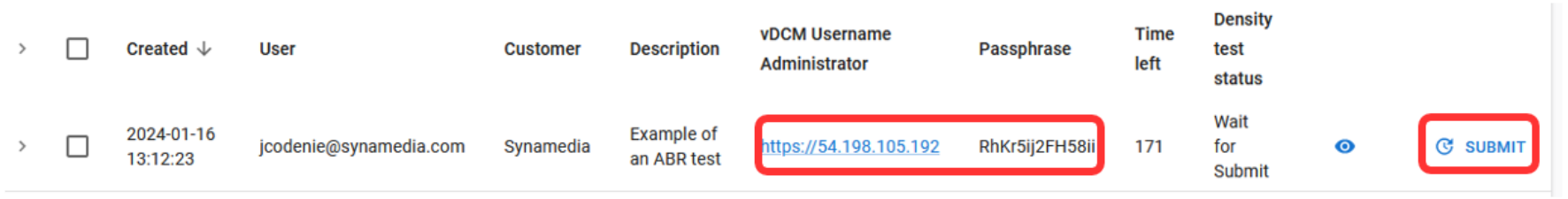
According to the action you perform:

- If you navigate away from the page, your test configuration will be stored in the database in “DRAFT” mode. You can edit/delete it any other time to complete the testing.
- Clicking on “CANCEL”: Your test record in draft mode will be deleted from the database.
- Clicking on “START”: the test configuration will be submitted without the possibility of tweaking it and pushed to the processing queue. There is no need to perform a manual “SUBMIT” action.
- Clicking on “DEPLOY”: Your test configuration will be deployed on a vDCM cloud instance. Before you actually submit the final test configuration, you can still tweak it on this cloud vDCM.
    - The status can be tracked on the “TEST AREA” page.

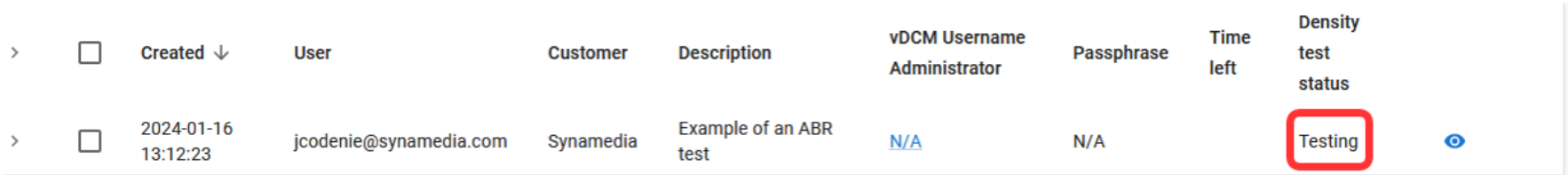



    - It takes approximately 10 minutes until the configuration is deployed and the status changes to “Wait for Submit”
    - Use the URL and the Passphrase credentials to access the vDCM. The username is “Administrator”. You can now tweak the settings. When you are pleased with the settings, go back to vdcm.info and click the “SUBMIT” option. Your test will be pushed into the processing queue.

Use the URL and the Passphrase credentials to access the vDCM. The username is “Administrator”. You can now tweak the settings. When you are pleased with the settings, go back to vdcm.info and click the “SUBMIT” option. Your test will be pushed into the processing queue.

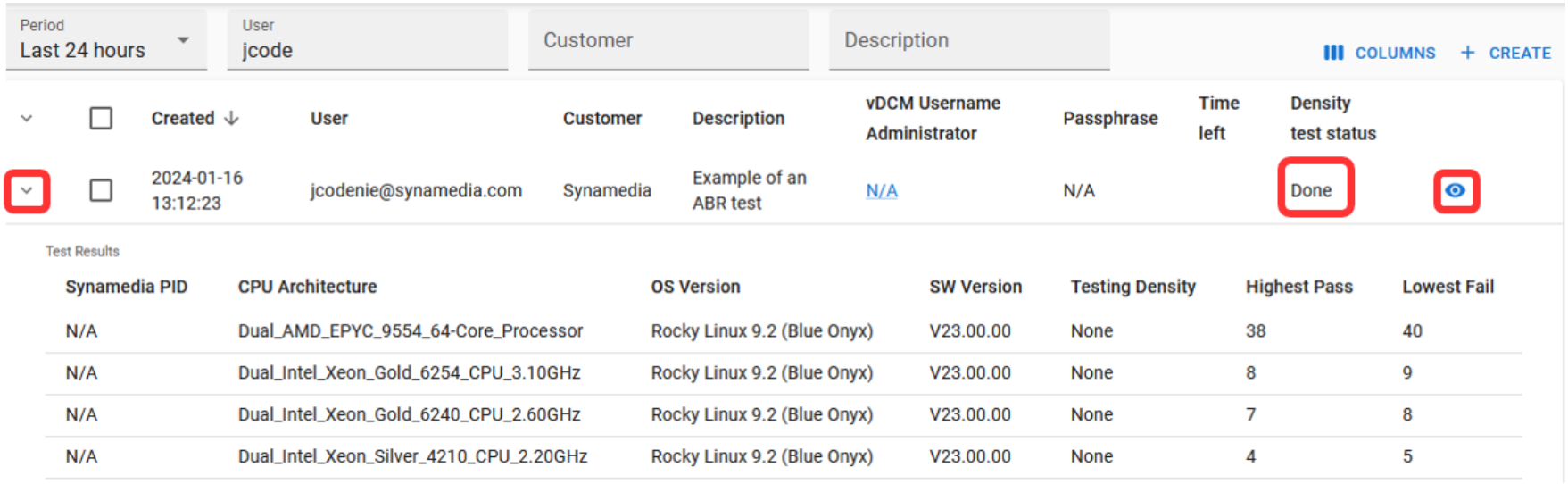


- Once test capacity is available, the test status will change to “Testing”.



| Created | User | Customer | Description | vDCM Username Administrator | Passphrase | Time left | Density test status |
|---|---|---|---|---|---|---|---|
| 2024-01-16 13:12:23 | jcodenie@synamedia.com | Synamedia | Example of an ABR test | N/A | N/A | | Testing |

- When the test is finished, the status will change to “Done”. Use the “expand” icon to see the test results and the “eye” icon to see details



Period: Last 24 hours | User: jcode | Customer | Description | COLUMNS | + CREATE

| Created | User | Customer | Description | vDCM Username Administrator | Passphrase | Time left | Density test status |
|---|---|---|---|---|---|---|---|
| 2024-01-16 13:12:23 | jcodenie@synamedia.com | Synamedia | Example of an ABR test | N/A | N/A | | Done |

Test Results

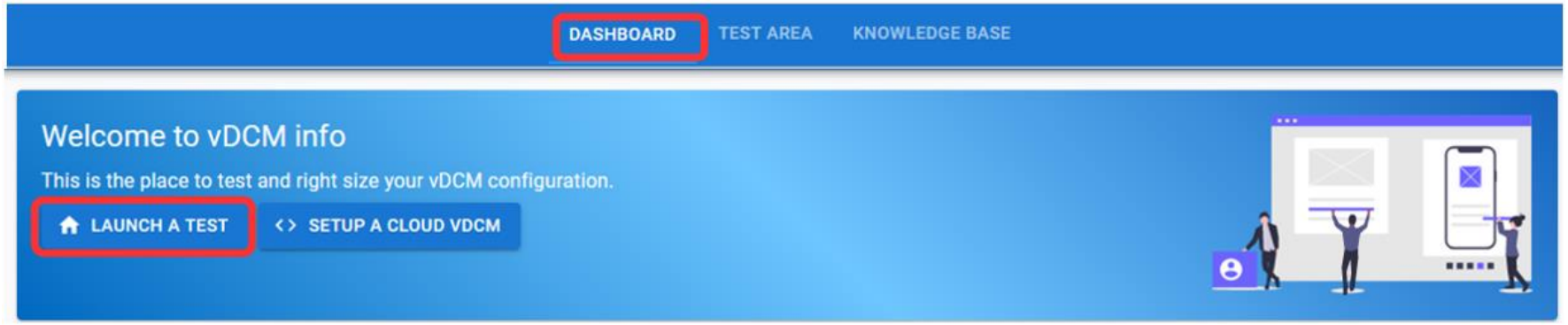
| Synamedia PID | CPU Architecture | OS Version | SW Version | Testing Density | Highest Pass | Lowest Fail |
|---|---|---|---|---|---|---|
| N/A | Dual_AMD_EPYC_9554_64-Core_Processor | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 38 | 40 |
| N/A | Dual_Intel_Xeon_Gold_6254_CPU_3.10GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 8 | 9 |
| N/A | Dual_Intel_Xeon_Gold_6240_CPU_2.60GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 7 | 8 |
| N/A | Dual_Intel_Xeon_Silver_4210_CPU_2.20GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 4 | 5 |

## Setting up a StatmuxTest using the UI menu

The use case used for illustration:

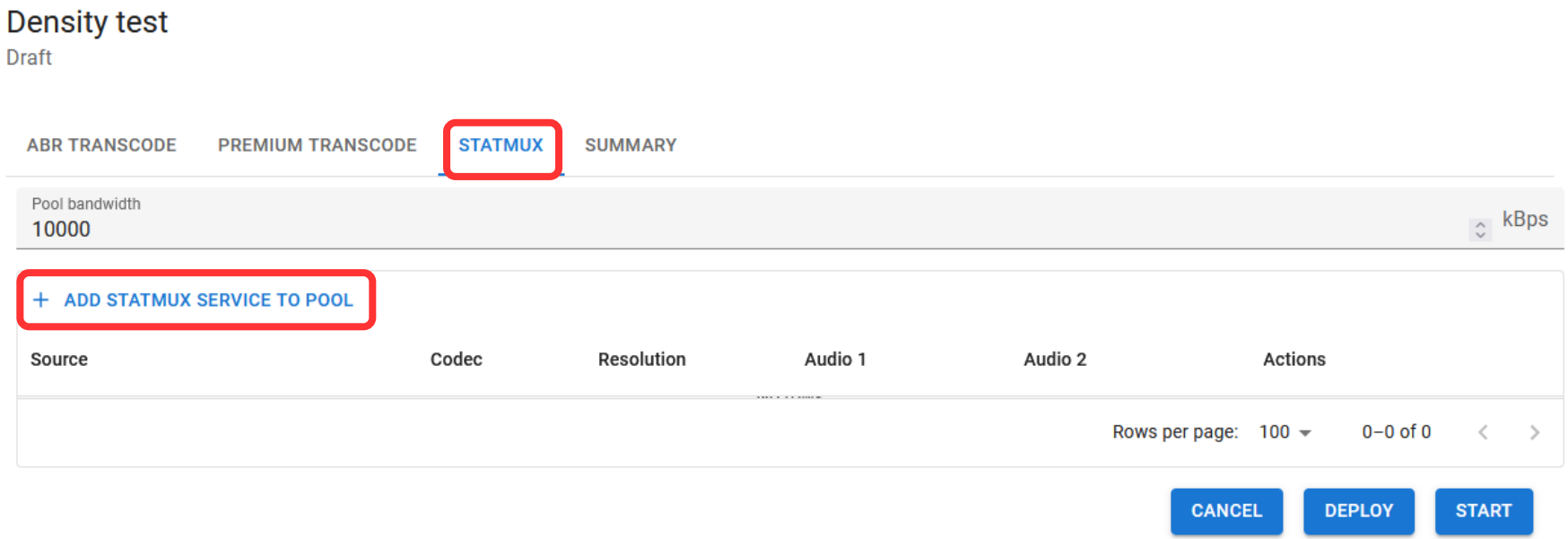
- 10 services in a statmux pool bandwidth of 20Mbps
- The input is 1080p50 4:2:0 8bit
- Codec is HEVC
- Output resolution is follow input
- No audio processing

Step 1: Navigate from the dashboard to the tab(s) where you can define the configuration using the “LAUNCH A TEST” button.

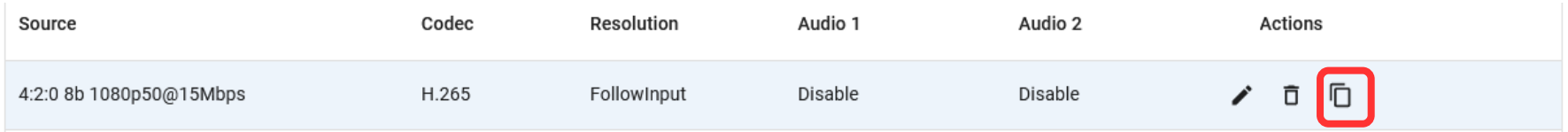



This will create a test record in “DRAFT” mode. Any test record can be any combination of an ABR ladder, (multiple) Premium transcodes and/or a statmux configuration. In this use case, a statmux test is defined.

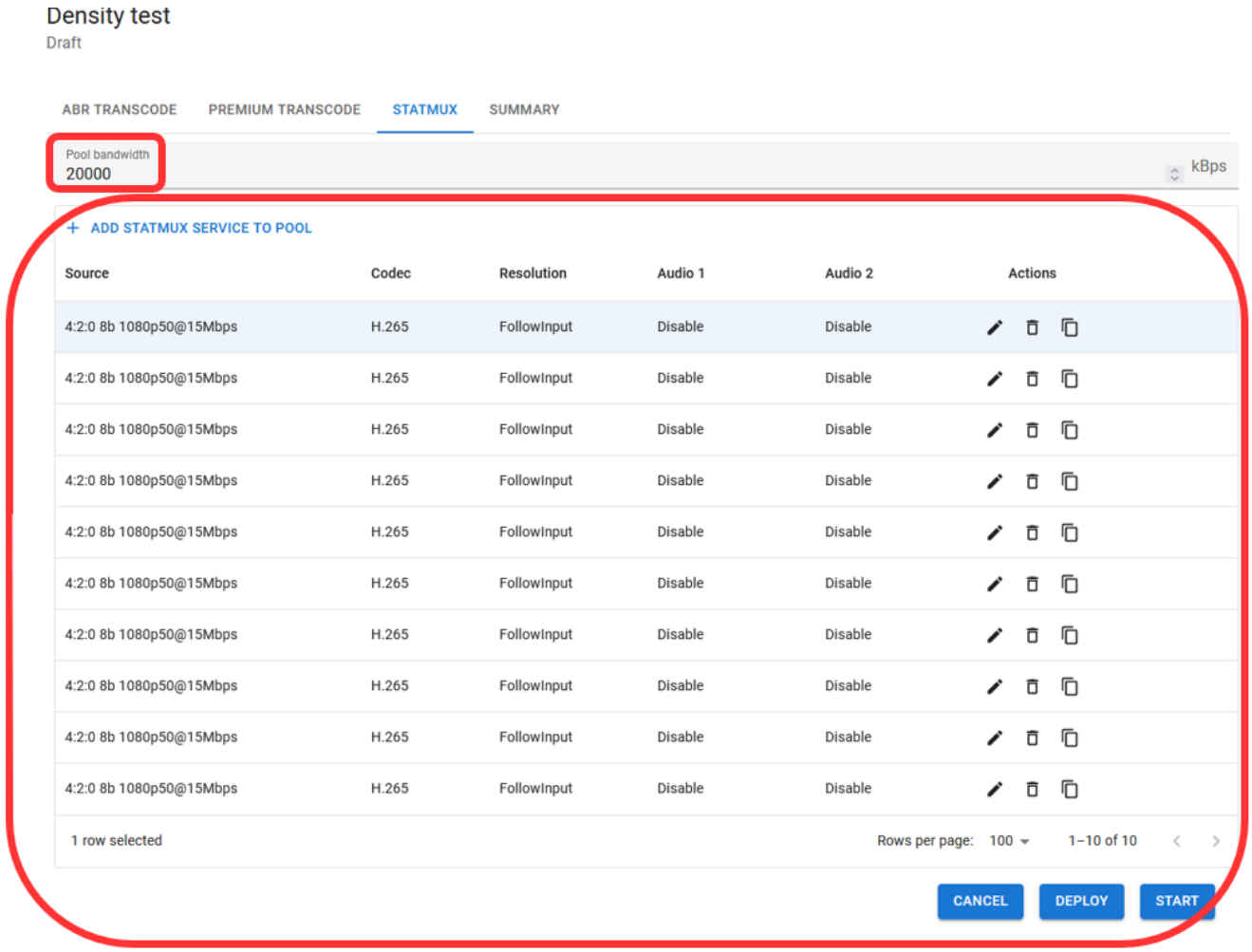
Step 2: Select the “STATMUX” tab and add the services in the pool by clicking on the “+ ADD STATMUX SERVICE TO POOL” option.



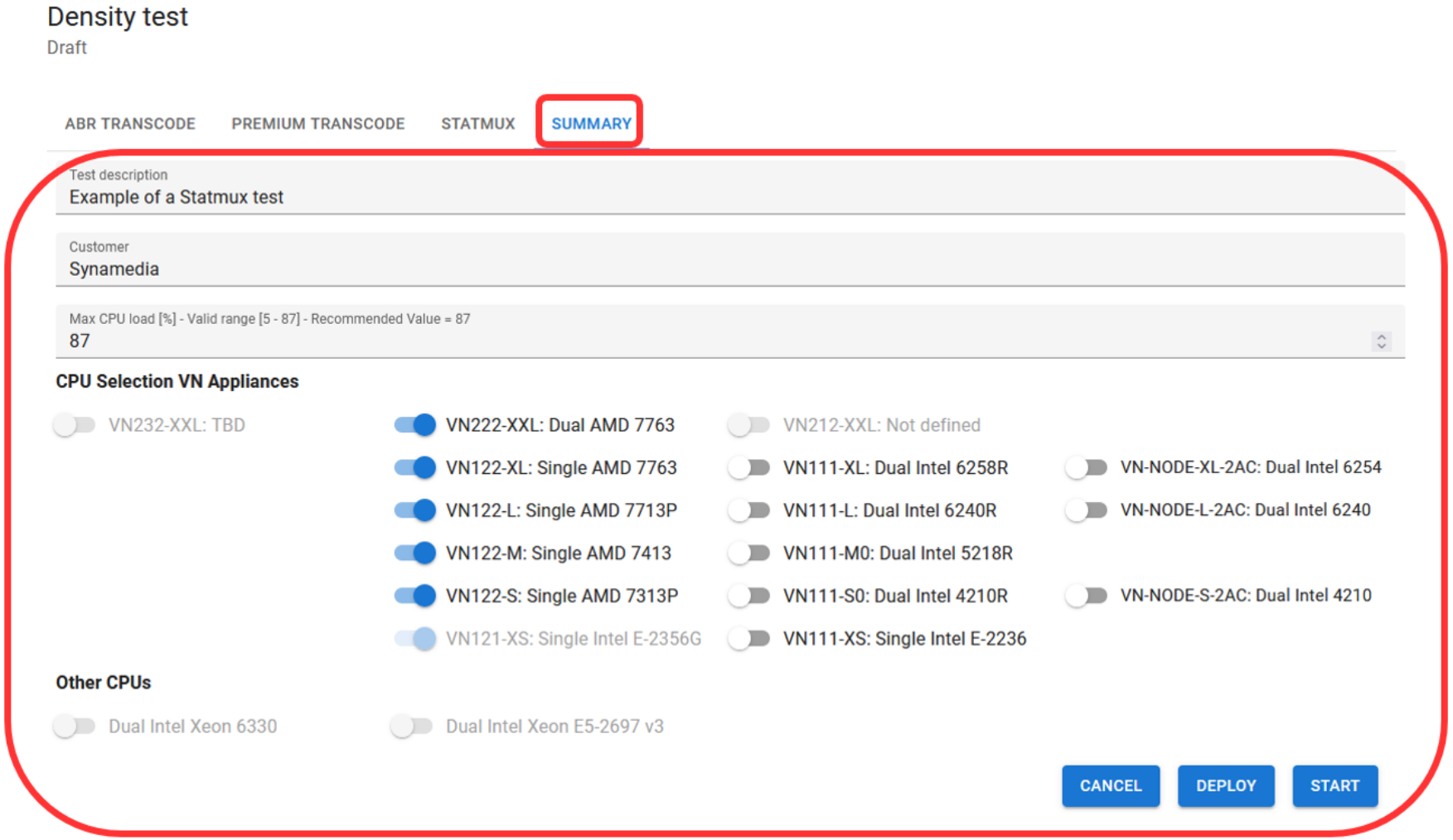

Tip : for identical settings you can use the copy icon



Step 3: Modify the parameters according to your choice.



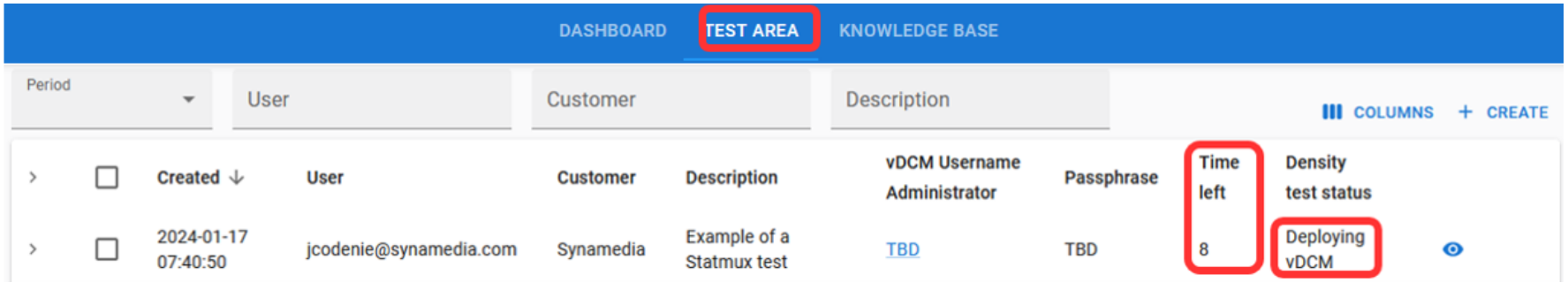
Step 4: Select the "SUMMARY" tab to complete general test parameters.



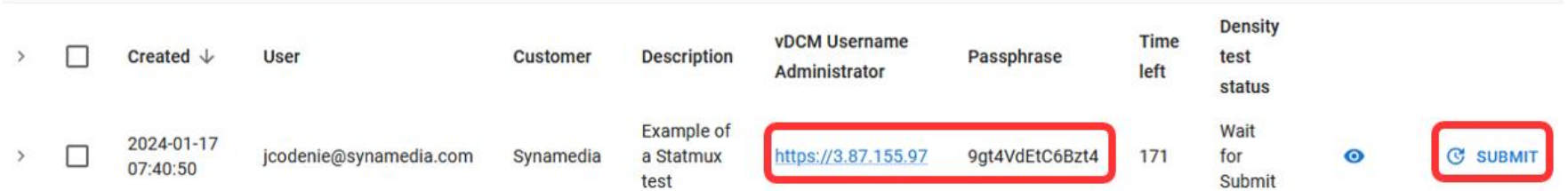
Step 5: Finally, in the test configuration, select either “CANCEL”, “DEPLOY”, “START” or navigate away from the page

According to the action you perform:

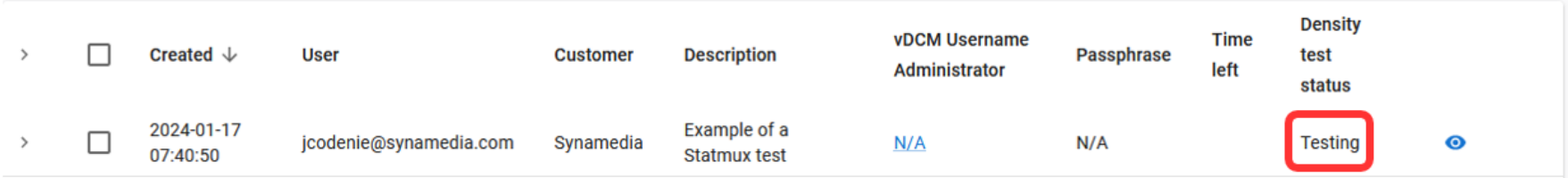
- If you navigate away from the page, your test configuration will be stored in the database in “DRAFT” mode. You can edit/delete it any other time to complete the testing.
- Clicking on “CANCEL”: Your test record in draft mode will be deleted from the database.
- Clicking on “START”: the test configuration will be submitted without the possibility of tweaking it and pushed to the processing queue. There is no need to perform a manual “SUBMIT” action.
- Clicking on “DEPLOY”: Your test configuration will be deployed on a vDCM cloud instance. Before you actually submit the final test configuration, you can still tweak it on this cloud vDCM.
    - The status can be tracked on the “TEST AREA” page.




    - It takes approximately 10 minutes until the configuration is deployed and the status changes to “Wait for Submit”
    - Use the URL and the Passphrase credentials to access the vDCM. The username is “Administrator”. You can now tweak the settings. When you are pleased with the settings, go back to vdcm.info and click the “SUBMIT” option. Your test will be pushed into the processing queue.

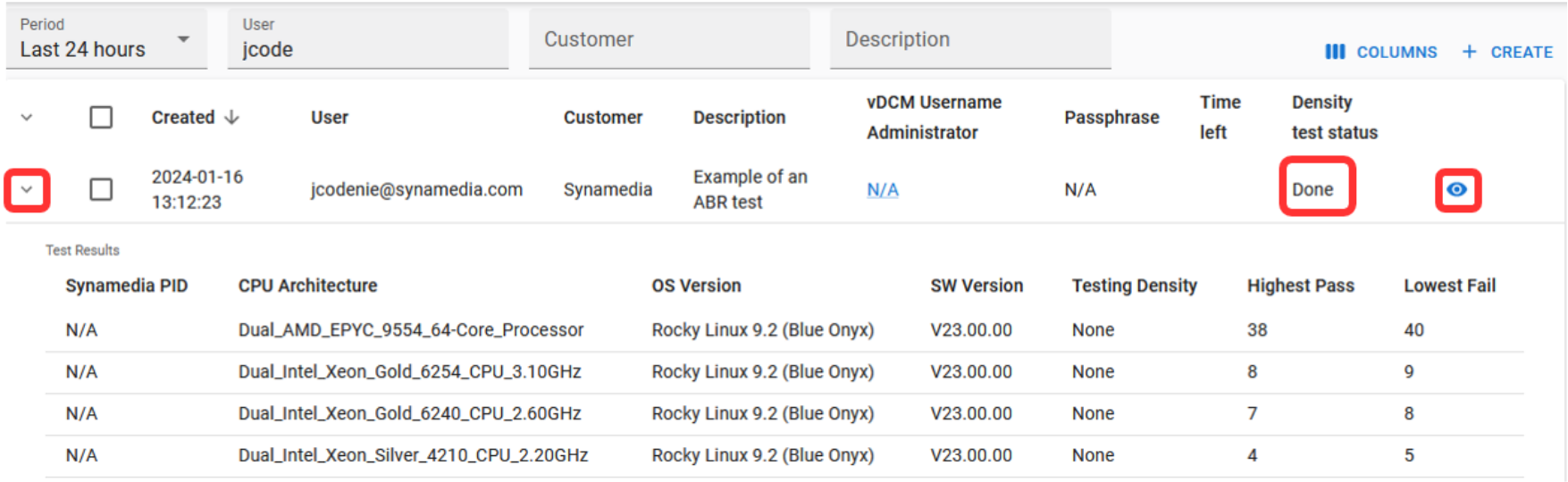


- Once test capacity is available, the test status will change to “Testing”.



| Created | User | Customer | Description | vDCM Username Administrator | Passphrase | Time left | Density test status |
|---|---|---|---|---|---|---|---|
| 2024-01-17 07:40:50 | jcodenie@synamedia.com | Synamedia | Example of a Statmux test | N/A | N/A | | Testing |

- When the test is final the status will change to “Done”. Use the “expand” icon to see the test results and the “eye” icon to see details



Period: Last 24 hours | User: jcode | Customer | Description | COLUMNS | + CREATE

| Created | User | Customer | Description | vDCM Username Administrator | Passphrase | Time left | Density test status |
|---|---|---|---|---|---|---|---|
| 2024-01-16 13:12:23 | jcodenie@synamedia.com | Synamedia | Example of an ABR test | N/A | N/A | | Done |

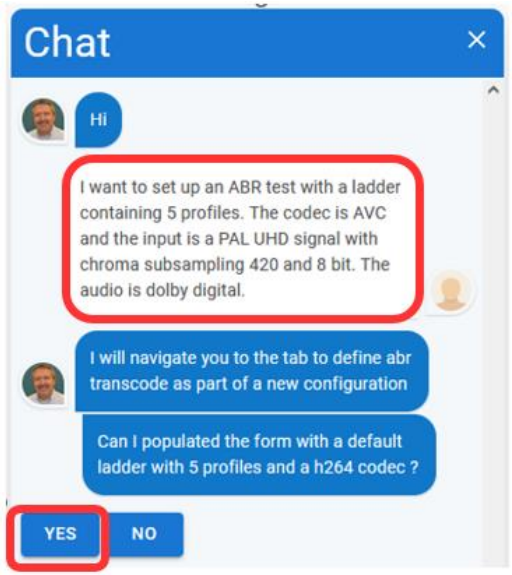
Test Results

| Synamedia PID | CPU Architecture | OS Version | SW Version | Testing Density | Highest Pass | Lowest Fail |
|---|---|---|---|---|---|---|
| N/A | Dual_AMD_EPYC_9554_64-Core_Processor | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 38 | 40 |
| N/A | Dual_Intel_Xeon_Gold_6254_CPU_3.10GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 8 | 9 |
| N/A | Dual_Intel_Xeon_Gold_6240_CPU_2.60GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 7 | 8 |
| N/A | Dual_Intel_Xeon_Silver_4210_CPU_2.20GHz | Rocky Linux 9.2 (Blue Onyx) | V23.00.00 | None | 4 | 5 |

## Setting up a default ABR Test using the chatbot

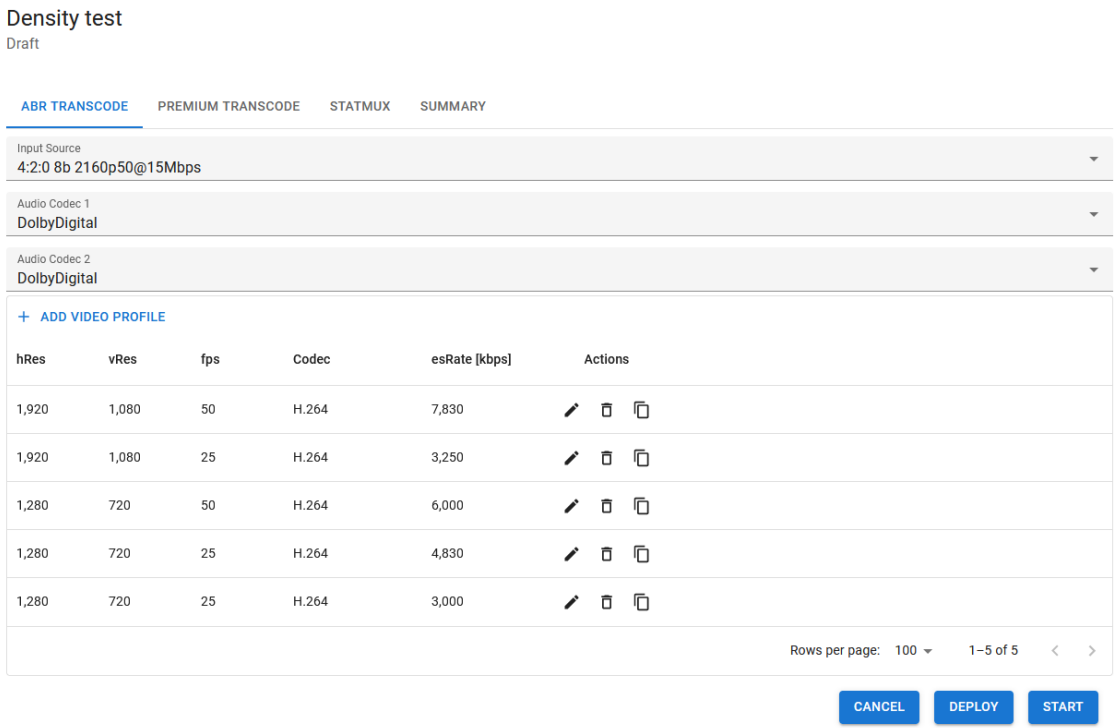
The chatbot function can be used to quickly populate the “ABR TRANSCODE” form with a pre-defined ladder. The ladder can be tweaked afterwards with menu actions in the form.

Step 1: Open the chatbot icon ( ) on the lower right side of the page and give a textual description of the desired ABR ladder, mentioning the number of profiles, the codec and the input signal (resolution, frame rate, chroma). There is no need to specify the individual parameters of all profiles. If not all information is provided the chatbot will launch follow up question(s). After confirmation, a pre-defined ladder will be filled in the UI page which can be tweaked to your specific use case.

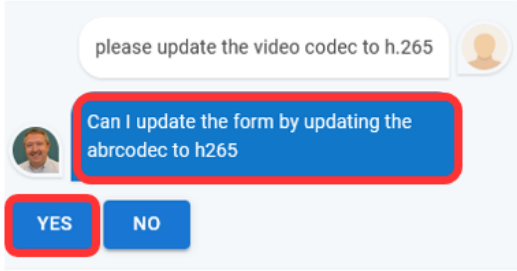



Confirm the action by clicking on yes

Step 2: proceed in the menu to tweak and submit the test as described in the section "*Setting up an ABR Test using the UI menu*"



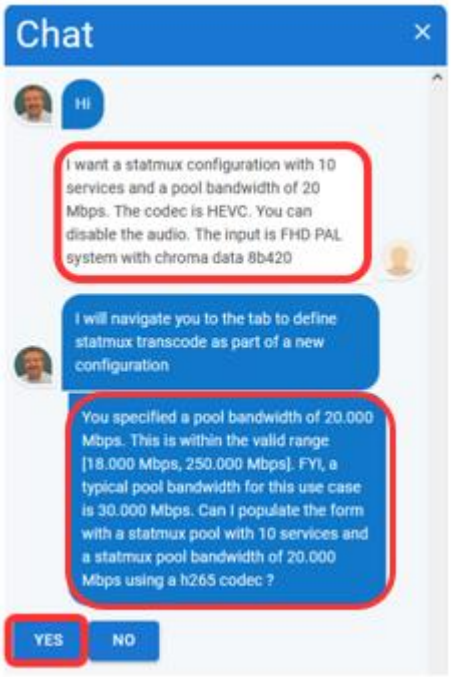

You can also use the chatbot to update codec in bulk for all profiles



## Setting up a Statmux Test using the chatbot

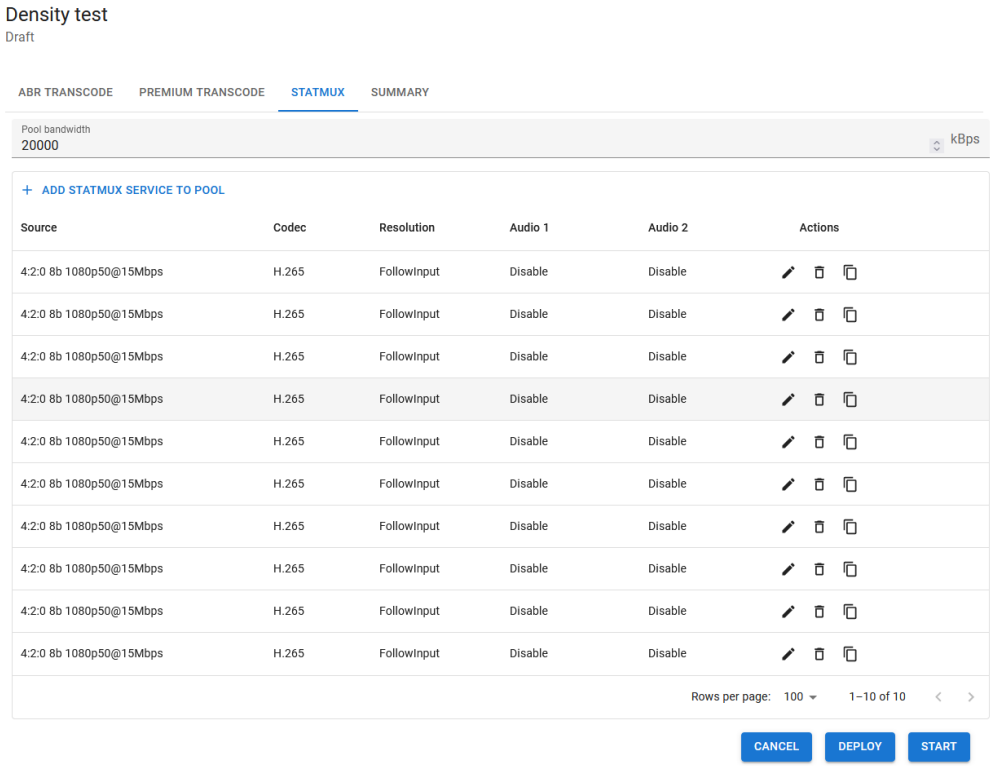
The chatbot function can be used to quickly populate the “STATMUX” form with a pre-defined ladder. The ladder can be tweaked afterwards with menu actions in the form.

Step 1: Open the chatbot icon ( ) on the lower right side of the page and give a textual description of your statmux configuration mentioning pool bandwidth, codec, audio and input parameters like resolution, frame rate and chroma information. If not all information is provided the chatbot will launch follow up question(s). Check the response in chat window for possible violations of the specified parameters.

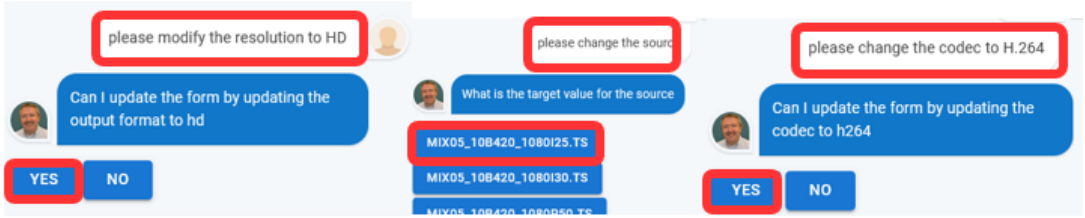



The chat bot response will include some data validation on the pool bandwidth value.

Use the menu to tweak the values and to submit your test as explained in the section "*Setting up a Statmux Test using the UI menu*".




Alternatively, you can use the chatbot to perform bulk actions to change values on all services with a single command. Below are some examples. The chatbot will check the validity of the pool bandwidth.



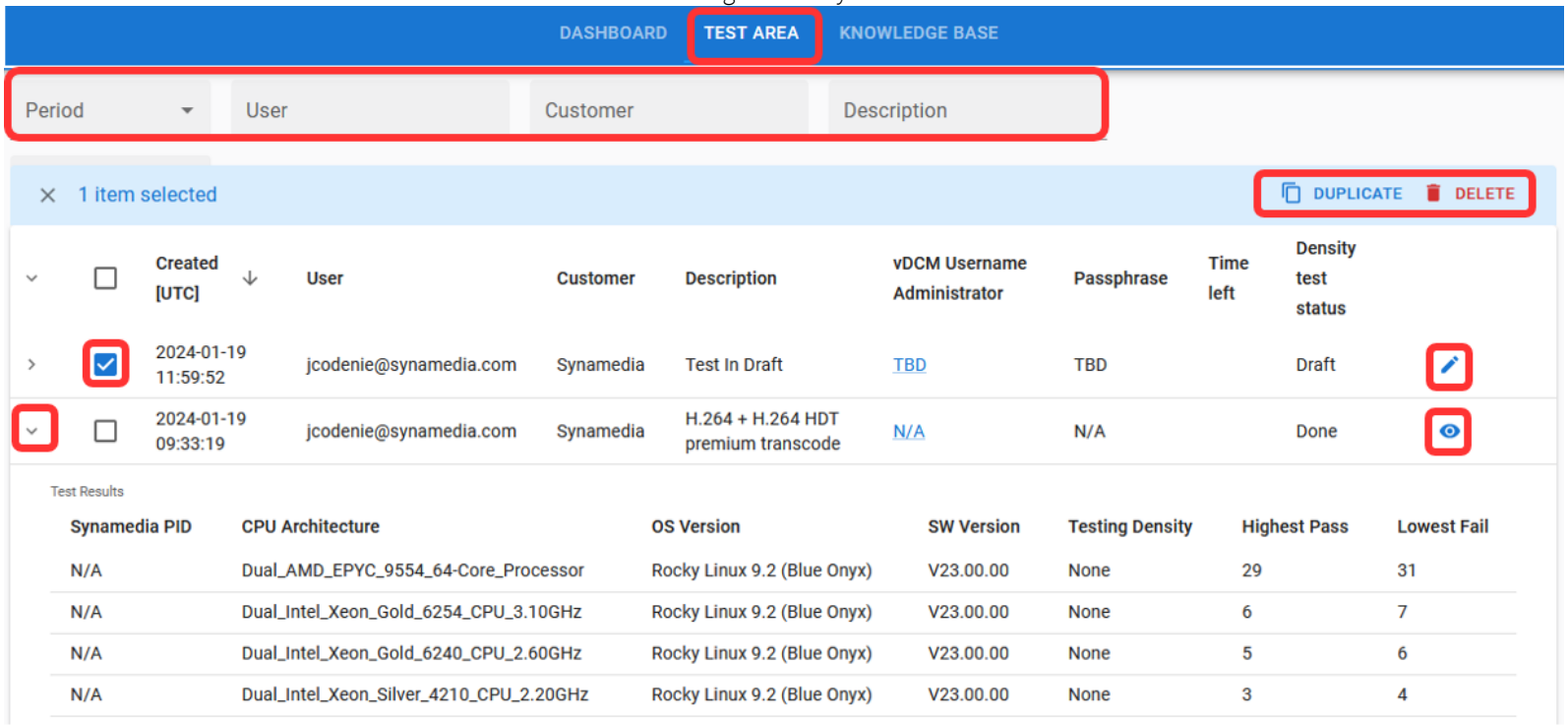
## Consulting Density Test Results

Test results can be consulted on the “TEST AREA” tab
Use the filters to limit the test list.
Use the expand icon to show the result summary
If you are a test owner, you can :

- Delete a test. It is good practice to regularly check/clean up your tests in Draft state
- Edit the test when it is in “Draft” status by clicking on the pencil icon

All users can:

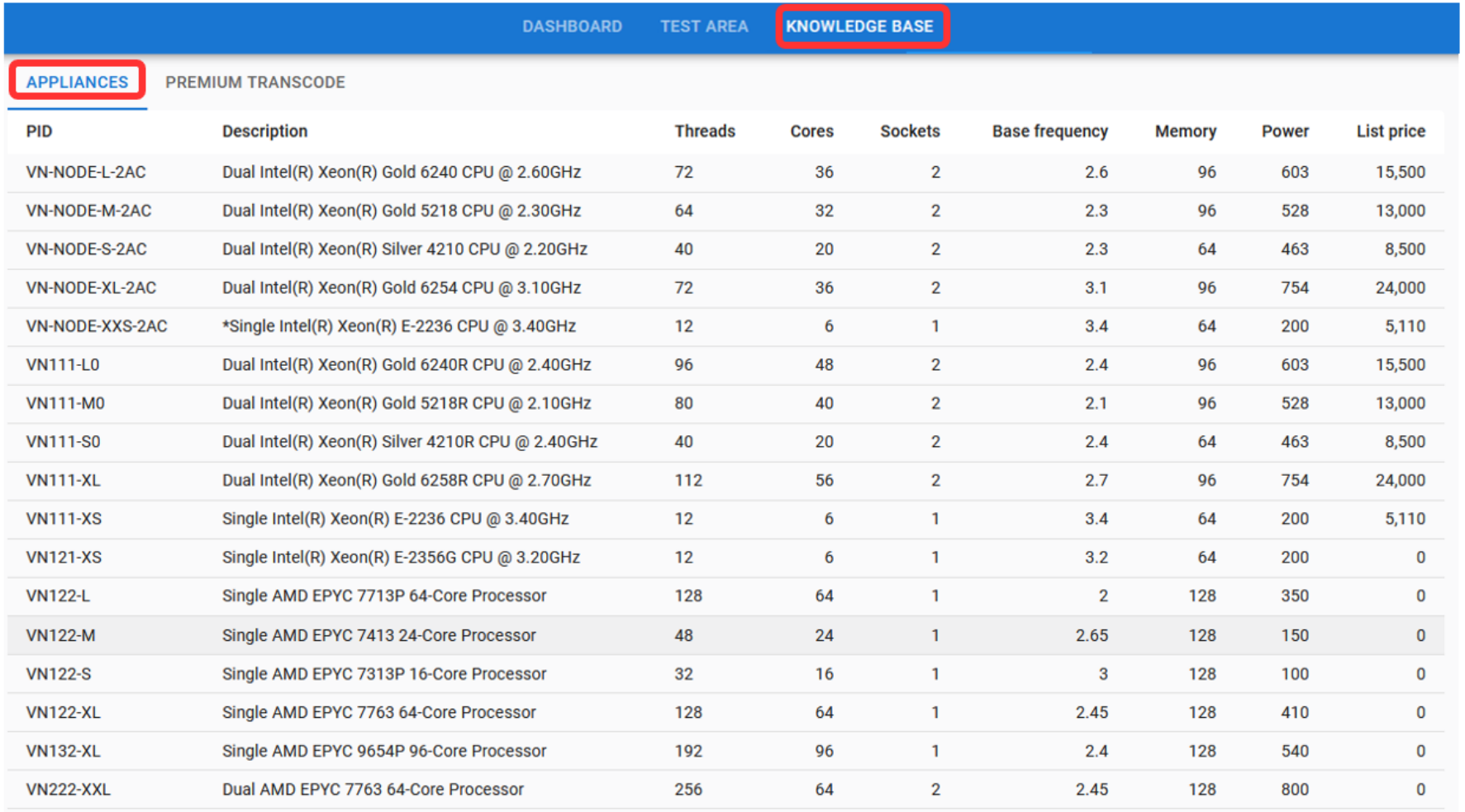
- Duplicate a test by clicking on the “pencil-icon”. As a result, a new test record is created in “Draft” state with prepopulated configuration tab
- View test results when the test is in “Done” state and clicking on the “eye-icon”



# Synamedia

## Consulting VN-node Appliances information

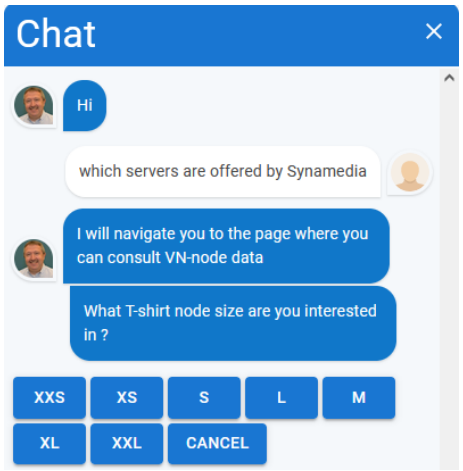
Navigate to the tab “KNOWLEDGE BASE”, sub page “APPLIANCES” for the overview. You can click on a specific PID to get more detailed information

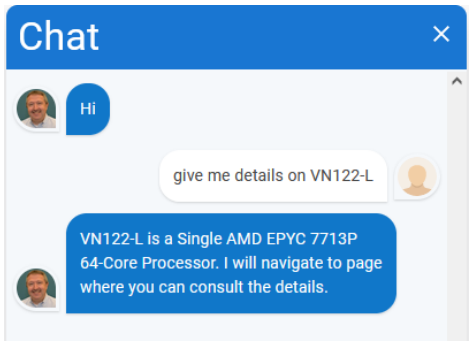



| PID | Description | Threads | Cores | Sockets | Base frequency | Memory | Power | List price |
|---|---|---|---|---|---|---|---|---|
| VN-NODE-L-2AC | Dual Intel(R) Xeon(R) Gold 6240 CPU @ 2.60GHz | 72 | 36 | 2 | 2.6 | 96 | 603 | 15,500 |
| VN-NODE-M-2AC | Dual Intel(R) Xeon(R) Gold 5218 CPU @ 2.30GHz | 64 | 32 | 2 | 2.3 | 96 | 528 | 13,000 |
| VN-NODE-S-2AC | Dual Intel(R) Xeon(R) Silver 4210 CPU @ 2.20GHz | 40 | 20 | 2 | 2.3 | 64 | 463 | 8,500 |
| VN-NODE-XL-2AC | Dual Intel(R) Xeon(R) Gold 6254 CPU @ 3.10GHz | 72 | 36 | 2 | 3.1 | 96 | 754 | 24,000 |
| VN-NODE-XXS-2AC | *Single Intel(R) Xeon(R) E-2236 CPU @ 3.40GHz | 12 | 6 | 1 | 3.4 | 64 | 200 | 5,110 |
| VN111-L0 | Dual Intel(R) Xeon(R) Gold 6240R CPU @ 2.40GHz | 96 | 48 | 2 | 2.4 | 96 | 603 | 15,500 |
| VN111-M0 | Dual Intel(R) Xeon(R) Gold 5218R CPU @ 2.10GHz | 80 | 40 | 2 | 2.1 | 96 | 528 | 13,000 |
| VN111-S0 | Dual Intel(R) Xeon(R) Silver 4210R CPU @ 2.40GHz | 40 | 20 | 2 | 2.4 | 64 | 463 | 8,500 |
| VN111-XL | Dual Intel(R) Xeon(R) Gold 6258R CPU @ 2.70GHz | 112 | 56 | 2 | 2.7 | 96 | 754 | 24,000 |
| VN111-XS | Single Intel(R) Xeon(R) E-2236 CPU @ 3.40GHz | 12 | 6 | 1 | 3.4 | 64 | 200 | 5,110 |
| VN121-XS | Single Intel(R) Xeon(R) E-2356G CPU @ 3.20GHz | 12 | 6 | 1 | 3.2 | 64 | 200 | 0 |
| VN122-L | Single AMD EPYC 7713P 64-Core Processor | 128 | 64 | 1 | 2 | 128 | 350 | 0 |
| VN122-M | Single AMD EPYC 7413 24-Core Processor | 48 | 24 | 1 | 2.65 | 128 | 150 | 0 |
| VN122-S | Single AMD EPYC 7313P 16-Core Processor | 32 | 16 | 1 | 3 | 128 | 100 | 0 |
| VN122-XL | Single AMD EPYC 7763 64-Core Processor | 128 | 64 | 1 | 2.45 | 128 | 410 | 0 |
| VN132-XL | Single AMD EPYC 9654P 96-Core Processor | 192 | 96 | 1 | 2.4 | 128 | 540 | 0 |
| VN222-XXL | Dual AMD EPYC 7763 64-Core Processor | 256 | 64 | 2 | 2.45 | 128 | 800 | 0 |

# Synamedia

As an alternative you can also use the chatbot functionality. Use phrases like below



# Synamedia

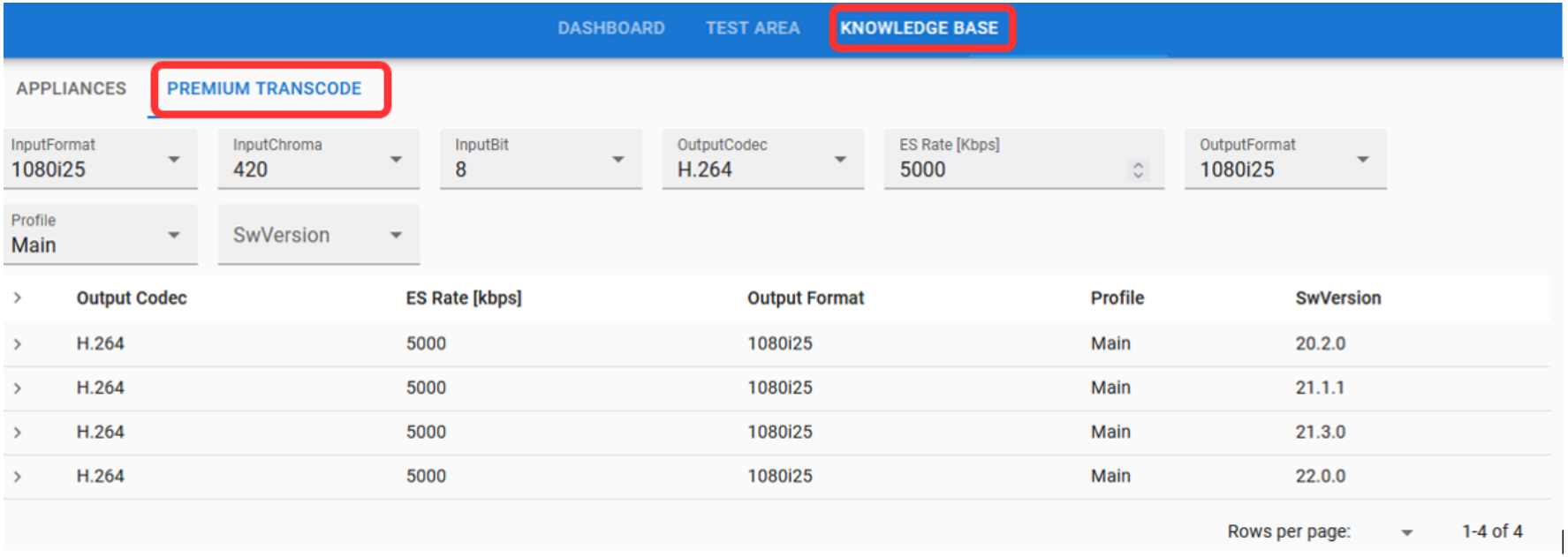
## Consulting Pre-tested Premium Transcode Results

A limited number of pre-tested Premium Transcode Results is available in a table. Note however that these results are less accurate than actual tests and that not all combinations are tested.

Best practice is to launch a test case for your specific use case configuration. The pre-tested table is to be used with caution !

Navigate to the “KNOWLEDGE BASE” tab and select “PREMIUM TRANSCODE”

Fill in the filters from left to right. If you leave the “SWVersion” filter blank all results will be shown



# Synamedia

Expand the SW version of interest to see the results

| | | | | | |
|---|---|---|---|---|---|
| ⌄ | H.264 | 5000 | 1080i25 | Main | 21.3.0 |

Test Results

| Synamedia PID | CPU Architecture | Density |
|---|---|---|
| VN222-XXL | Dual AMD EPYC 7763 64-Core Processor | 79 |
| VN122-XL | Single AMD EPYC 7763 64-Core Processor | 38 |
| VN122-L | Single AMD EPYC 7713P 64-Core Processor | 36 |
| N/A | Dual Intel(R) Xeon(R) Gold 6330 CPU @ 2.00GHz | 31 |
| VN111-XL | Dual Intel(R) Xeon(R) Gold 6258R CPU @ 2.70GHz | 28 |
| VN111-L0 | Dual Intel(R) Xeon(R) Gold 6240R CPU @ 2.40GHz | 24 |
| VN-NODE-XL-2AC | Dual Intel(R) Xeon(R) Gold 6254 CPU @ 3.10GHz | 20 |
| VN111-M0 | Dual Intel(R) Xeon(R) Gold 5218R CPU @ 2.10GHz | 18 |
| VN-NODE-L-2AC | Dual Intel(R) Xeon(R) Gold 6240 CPU @ 2.60GHz | 18 |
| N/A | Dual Intel(R) Xeon(R) CPU E5-2697 v3 @ 2.60GHz | 12 |
| VN111-S0 | Dual Intel(R) Xeon(R) Silver 4210R CPU @ 2.40GHz | 10 |
| VN-NODE-S-2AC | Dual Intel(R) Xeon(R) Silver 4210 CPU @ 2.20GHz | 9 |
| VN111-XS | Single Intel(R) Xeon(R) E-2236 CPU @ 3.40GHz | 5 |
| N/A | Single Intel(R) Xeon(R) E-2386G CPU @ 3.50GHz | 4 |