

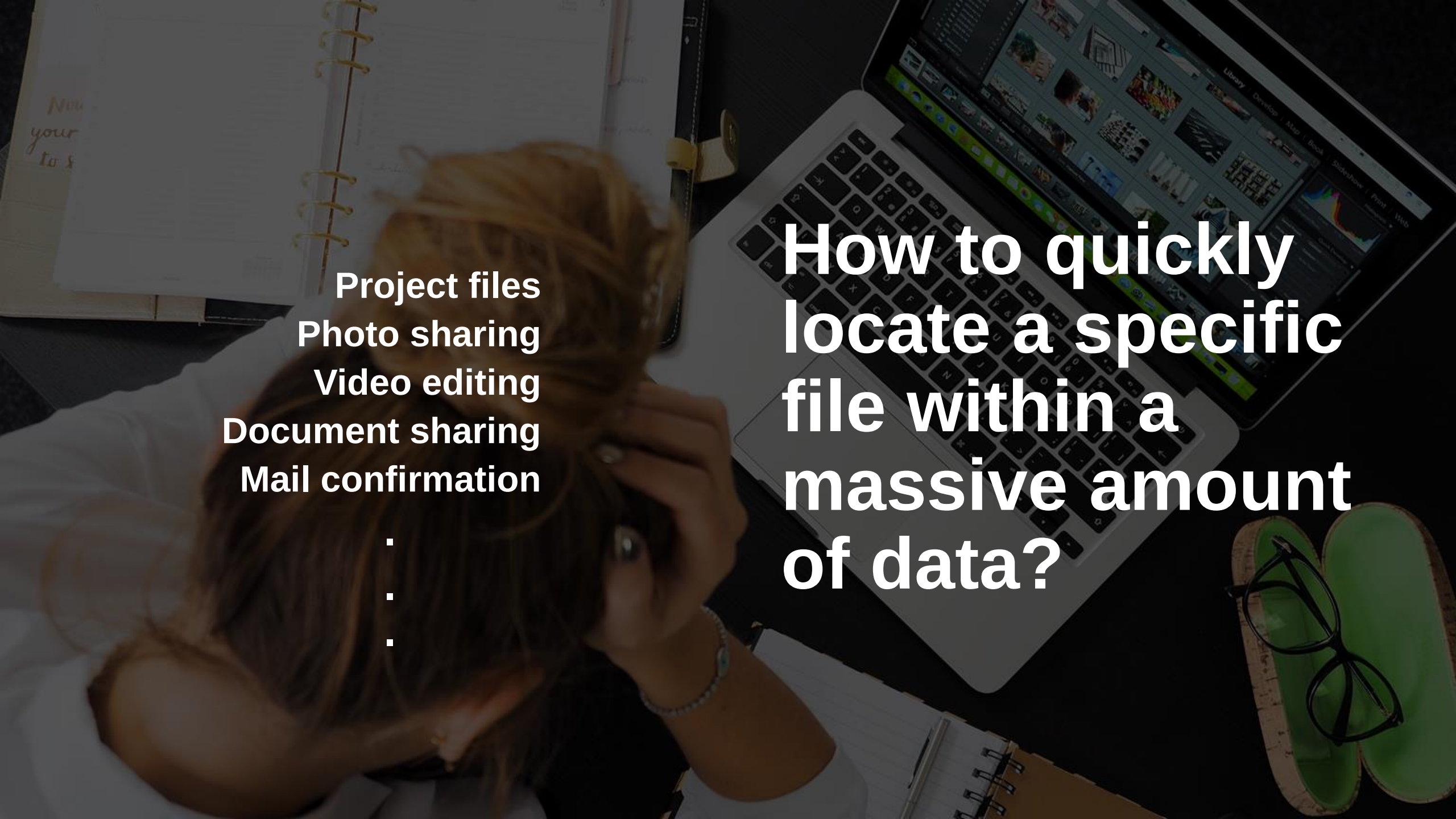
QNAP



Qsirch

Get the most from Qsirch's
file indexing and search





Project files
Photo sharing
Video editing
Document sharing
Mail confirmation

·
·
·

**How to quickly
locate a specific
file within a
massive amount
of data?**

**Over 500 thousands downloads!
What are you waiting for?**

You need
Qsirch
full-text
search



50+
formats
Search
Preview
Share

35+
Filter
conditions

4
Search
methods



50+ formats
Search
Preview
Share

Preview

PDF, Microsoft Office, **email**

Music, photo & video instant preview

360 panoramic video/photo preview

Streaming to
VLC Client

Share

Various Methods

NAS user

Email

More media



Custom Domain

Smartshare

Custom domain

High flexibility



Secured Sharing

Valid date

Password

SSL Secured

Combined
with
QmailAgent
Find the
specific emails

01

Install & Setup QmailAgent



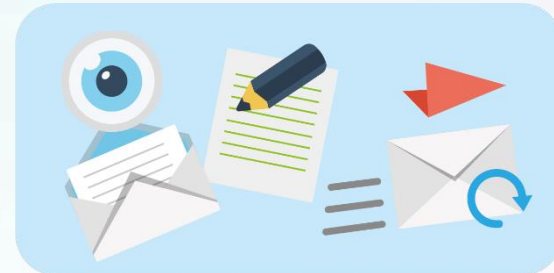
02

Search emails with Qsirch



03

Preview, reply, forward



Full-text searching for email content

Category

Email X



Custom filters

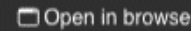


Preview

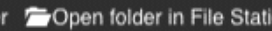
Download Open in browser Open folder in File Station Open with QmailAgent



Download



Open in browser



Open folder in File Station



Open with QmailAgent



Reply and forward mails directly

Two-way
integration
Mail search
is more
comprehensive

01

Install & Setup QmailAgent



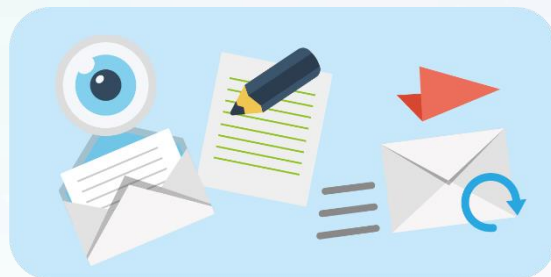
02

Integration with Qsirch



03

Preview, reply, forward



qsirch qnap

Advanced Search

From:

To:

Subject:



Full-text searching for email content

Exact word or phrase:

☐ Has attachment

Search



qsirch qnap

QmailAgent

Compose

Inbox 27

Drafts

Sent

Spam 2

Trash

Drafts

[Gmail]

全部邮件 1637

已加星

重要邮件 2

Junk

Sent

Trash 1

☒	Nina Ni	2018-10-22 16:03	
☐	Nina Ni	2018-10-22 16:03	
☐	Nina Ni	2018-10-22 16:03	
☐	QNAP Systems, Inc.	2018-09-29 08:38	
☐	QNAP Systems, Inc.	2018-09-29 08:38	
☐	QNAP Systems, Inc.	2018-07-23 16:55	
☐	QNAP Systems, Inc.	2018-04-20 17:21	
☐	QNAP Systems, Inc.	2018-04-10 12:36	
☐	QNAP Systems, Inc.	2018-03-09 11:55	
☐	QNAP Systems, Inc.	2018-02-14 17:11	
☐	QNAP Systems, Inc.	2018-01-23 18:09	
☐	QNAP Systems, Inc.	2017-12-25 17:25	
☐	QNAP Systems, Inc.	2017-12-21 17:20	
☐	QNAP Systems, Inc.	2017-11-03 20:10	
☐	QNAP Systems, Inc.	2017-10-27 23:40	
☐	QNAP Systems, Inc.	2017-10-26 18:23	
☐	QNAP Systems, Inc.	2017-09-25 16:39	
☐	QNAP Systems, Inc.	2017-09-14 17:09	
☐	QNAP Systems, Inc.	2017-08-28 19:38	

Instant Backup

Qsirch 3.2 adds more useful colors. You can also search by your photo's color

Qsirch 3.1 (and later) features an advanced algorithm that indexes your photos based on colors. Photos can be quickly found by selecting a color filter.

Color

- ☐ brown (0)
- ☒ blue (31)
- ☐ green (0)



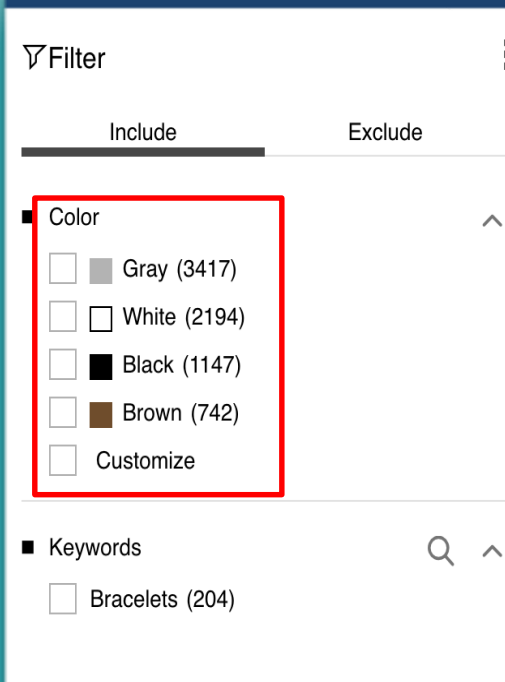
Preview



Reply and forward mails directly

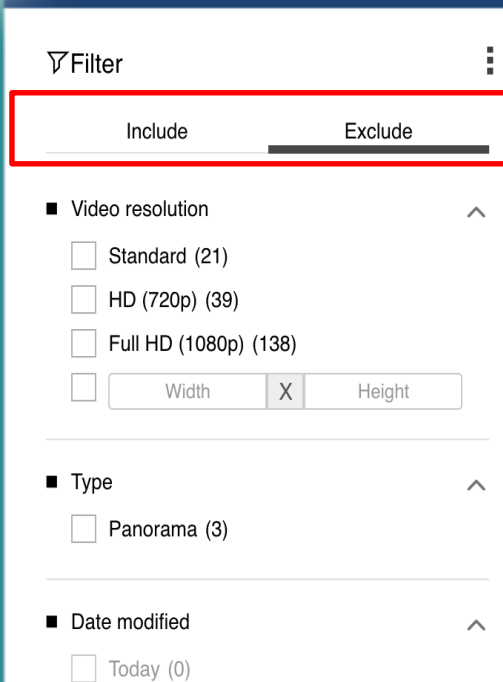
35+
Filter conditions

35+
filter conditions



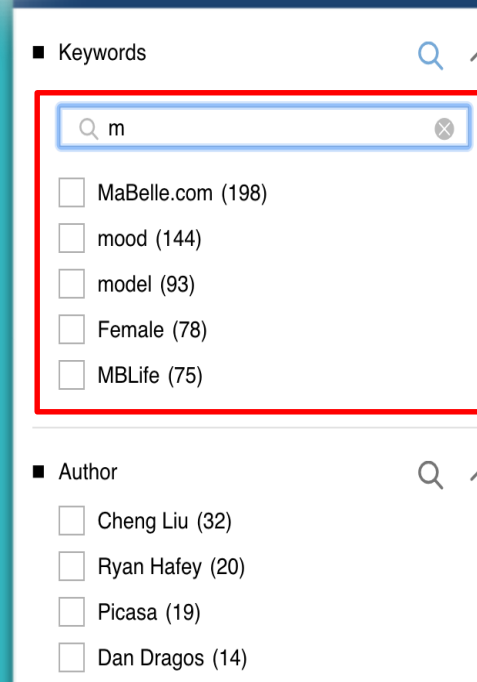
New filter for image
Color filter

Flexible



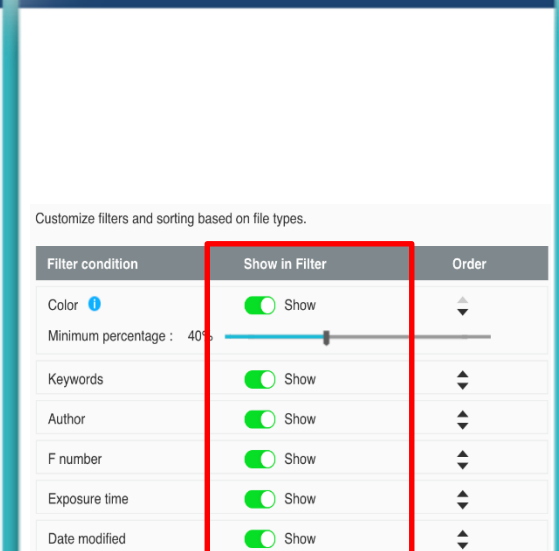
Include or Exclude
Depend on your needs

Quickly Specify



Search function for
filter conditions

Customizable



Adjust the **order of filters** by your preferences

4

Search methods

1



Web

2



Mac
Finder

QTS 4.3.5
Key function

3



Mobile

4



Browser
Extension

Integration with Mac Finder

Perform tasks in the way you're familiar with!

1. SMB folder
2. NAS/Local -
Full-text search at the same time
3. Email/Image -
Metadata can also be searched

Notice : This feature will be supported from QTS 4.3.5.



DEMO



**Analysis of Qsirch major technologies
by our senior R&D engineer**

Qsirch Architecture



Indexing Engine



Data
Collection



Indexer

Search Operation



Query
Parser

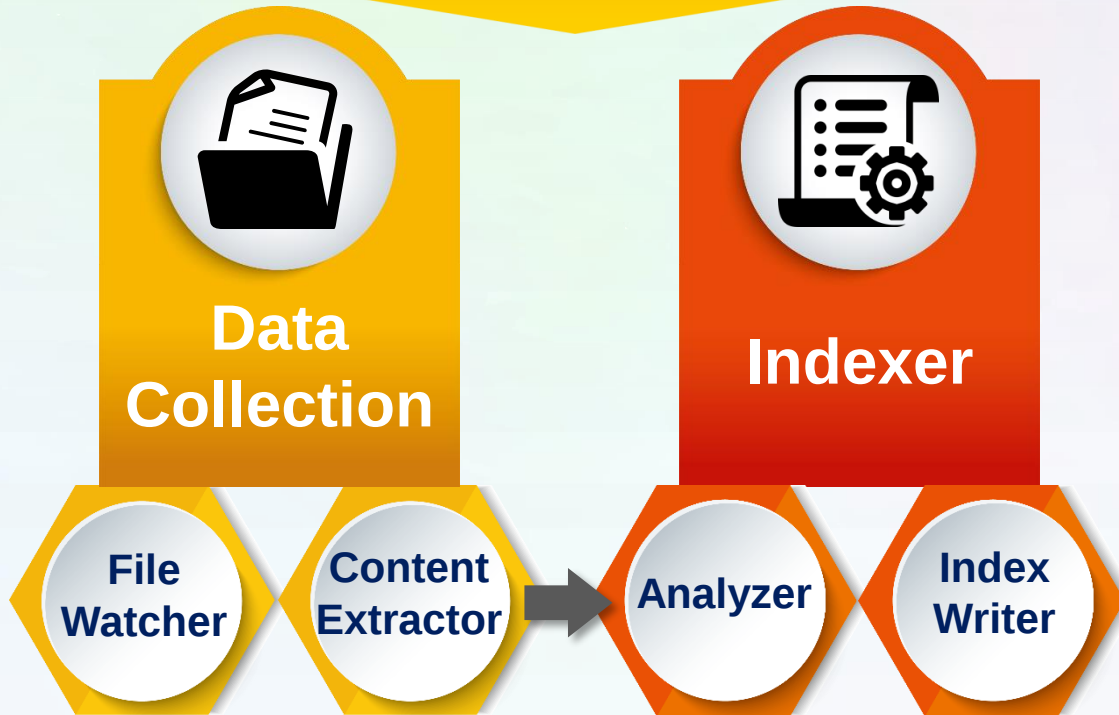


Search
Module

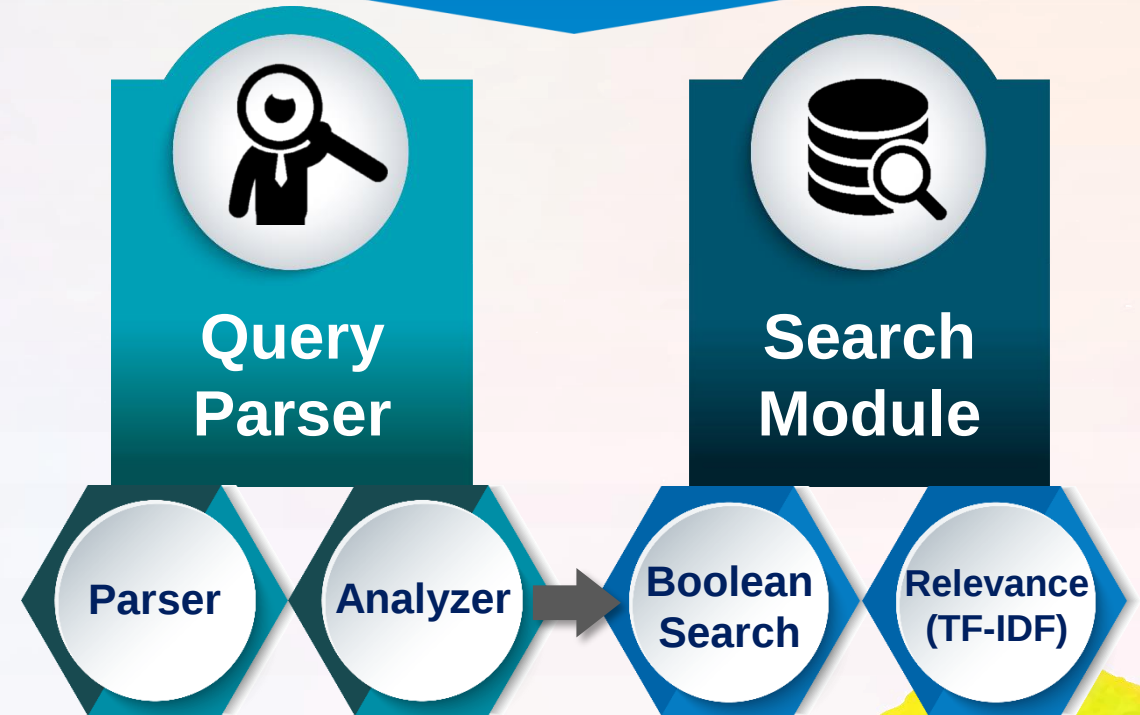
Qsirsch Architecture



Indexing Engine



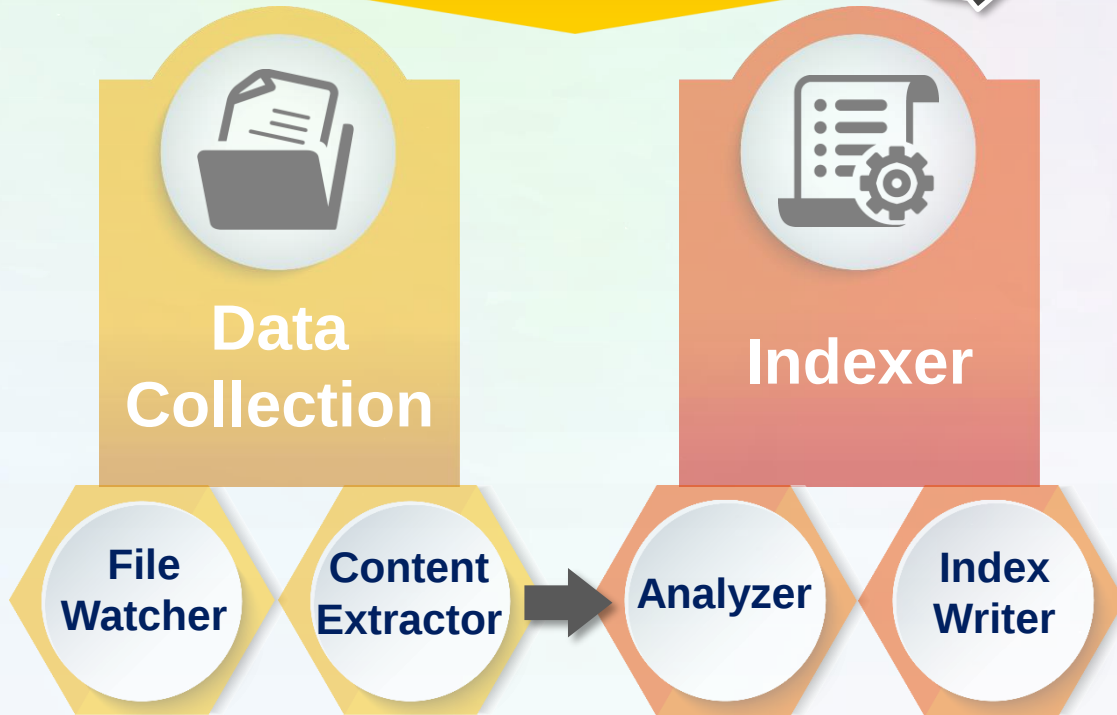
Search Operation



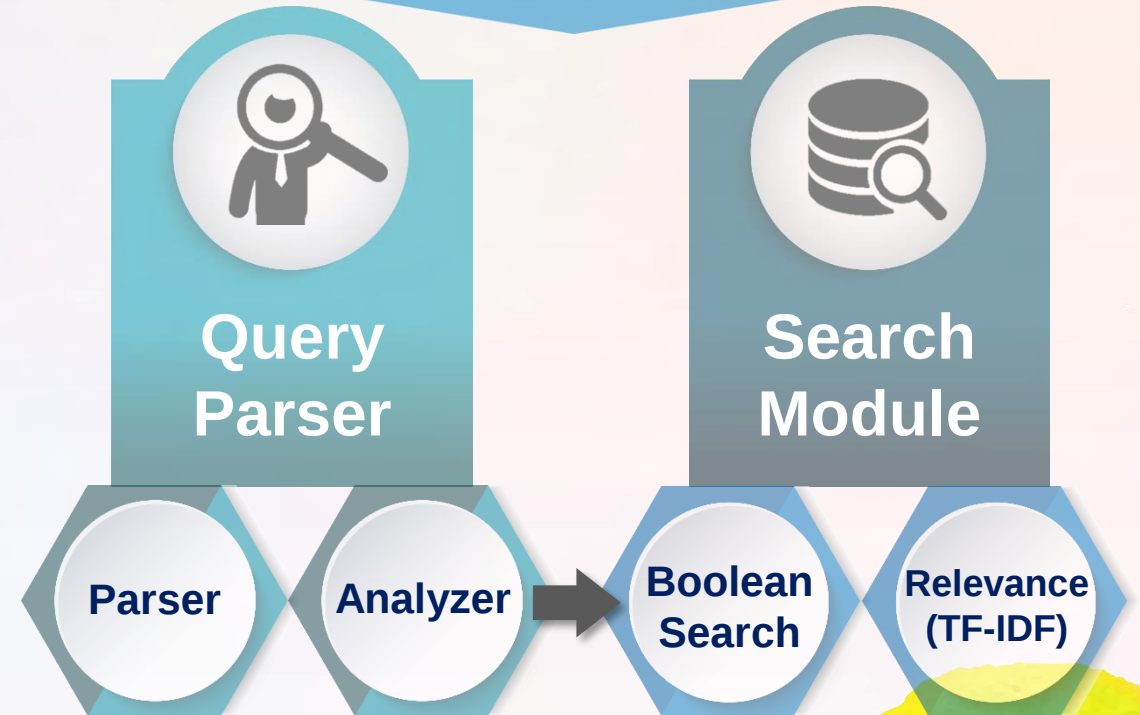
Qsirsch Architecture

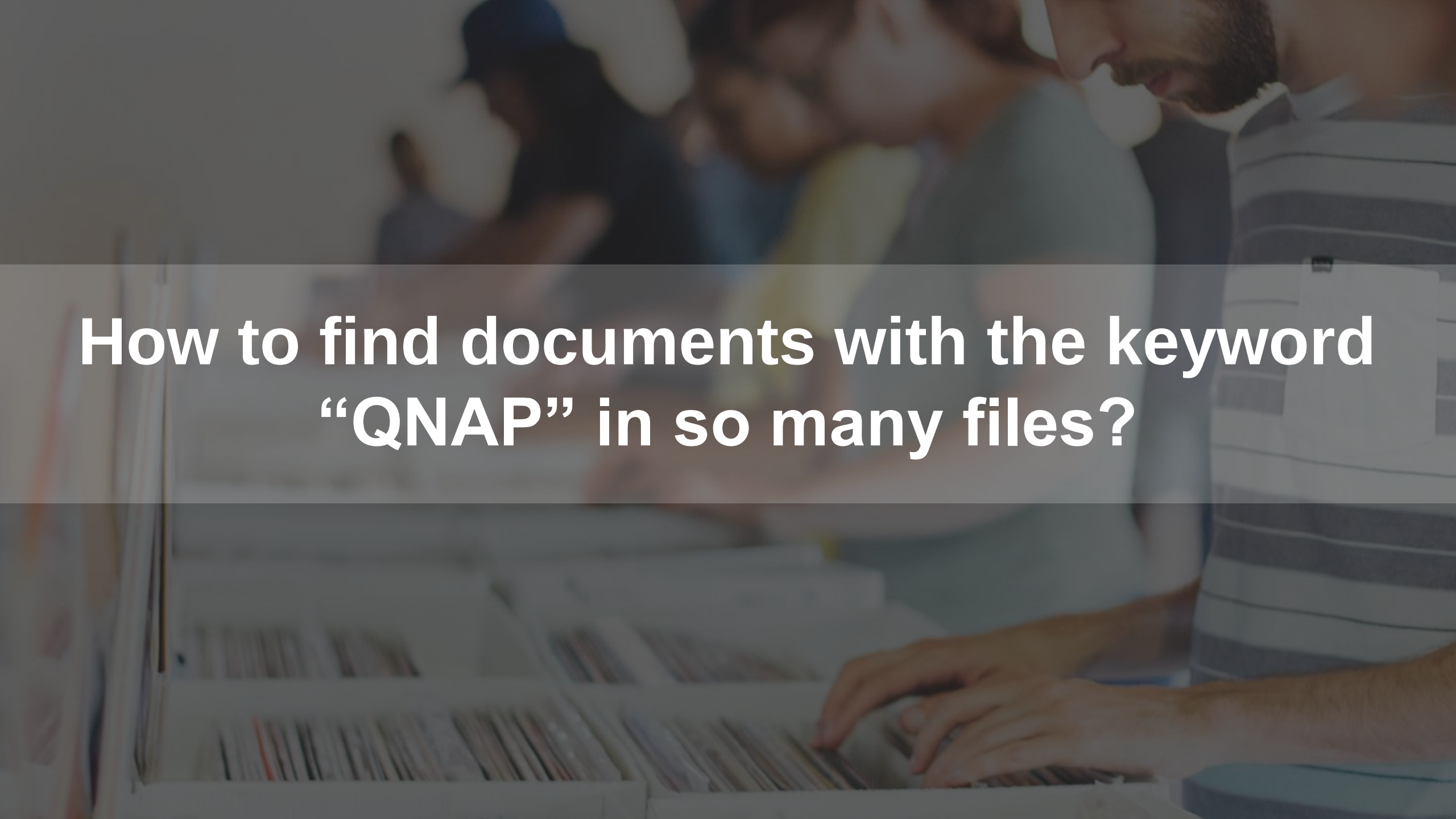


Indexing Engine



Search Operation





**How to find documents with the keyword
“QNAP” in so many files?**

Indexing

Inverted index

Index

0-1 loss, [100](#), [271](#)

Absolute value rectification, [187](#)

Accuracy, [415](#)

Activation function, [165](#)

Active constraint, [92](#)

AdaGrad, [301](#)

ADALINE, *see* adaptive linear element

Adam, [303](#), [417](#)

Adaptive linear element, [14](#), [21](#), [23](#)

Adversarial example, [263](#)

Adversarial training, [264](#), [267](#), [523](#)

Affine, [107](#)

AIS, *see* annealed importance sampling

Almost everywhere, [68](#)

Almost sure convergence, [126](#)

Bag of words, [462](#)

Bagging, [250](#)

Batch normalization, [262](#), [417](#)

Bayes error, [114](#)

Bayes' rule, [67](#)

Bayesian hyperparameter optimization, [427](#)

Bayesian network, *see* directed graphical model

Bayesian probability, [52](#)

Bayesian statistics, [132](#)

Belief network, *see* directed graphical model

Bernoulli distribution, [59](#)

BFGS, [310](#)

Bias, [121](#), [223](#)

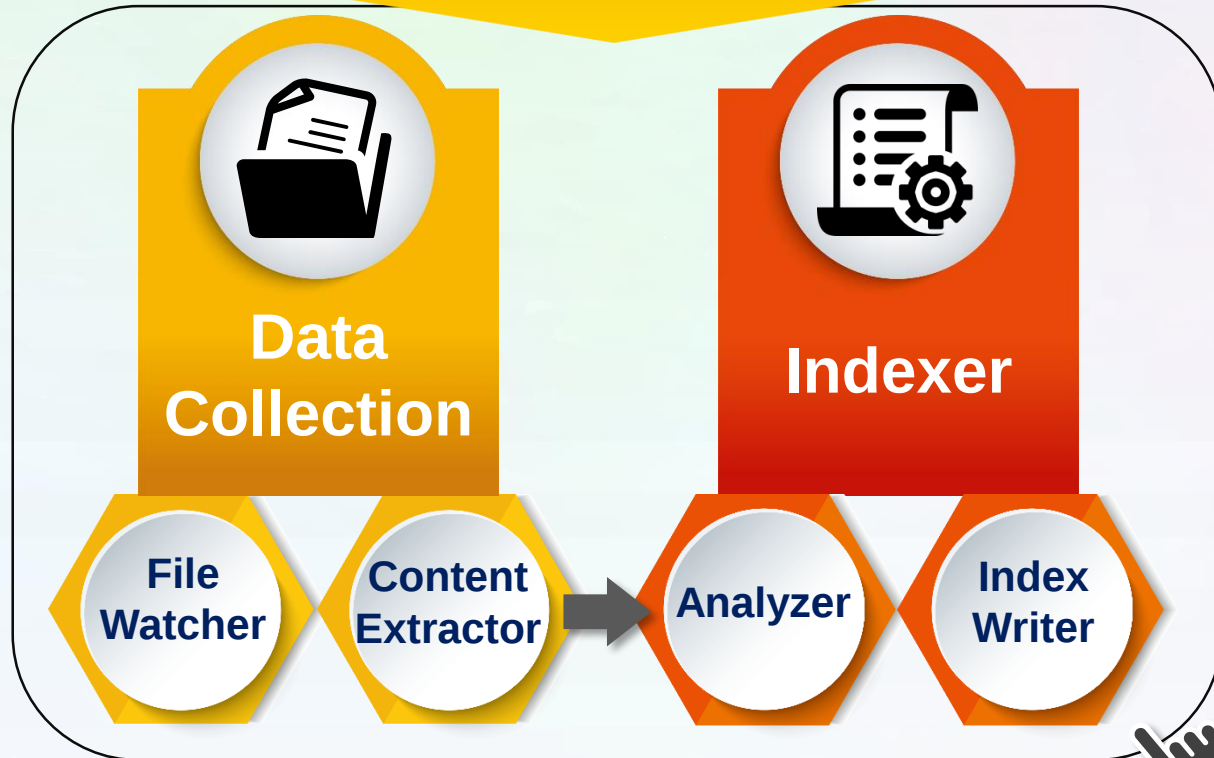
Bias parameter, [107](#)

Biased importance sampling, [586](#)

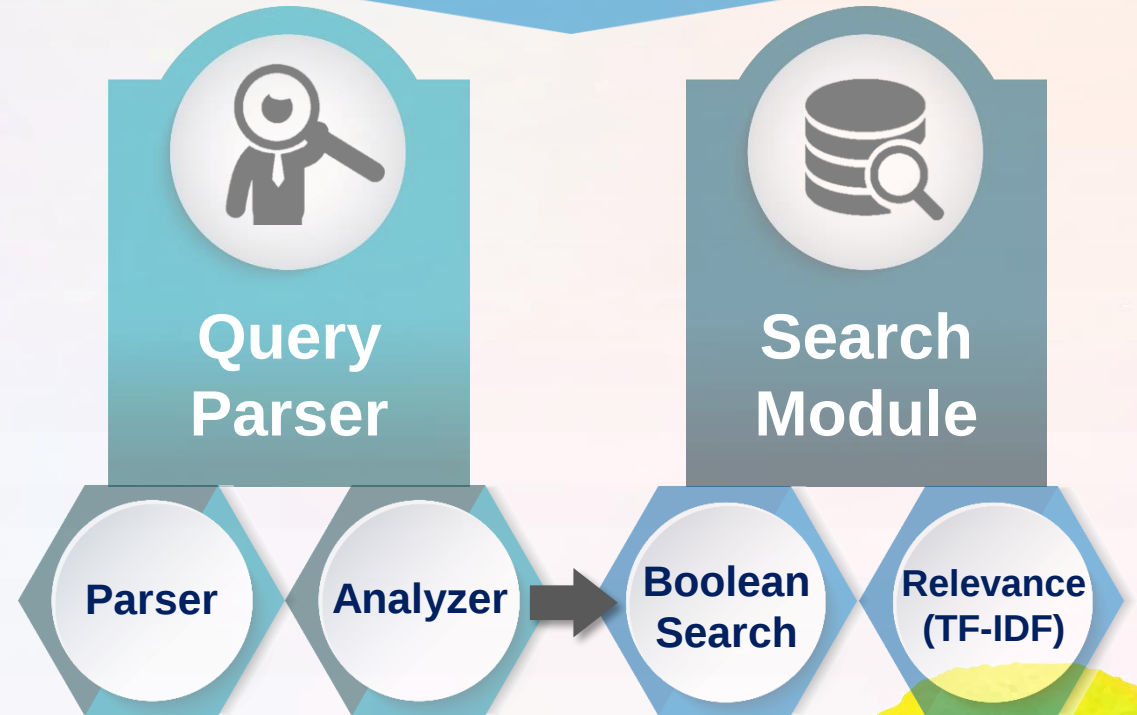
Qsirsch Architecture



Indexing Engine



Search Operation



Indexing Engine



Find a file on NAS



Extract contents from the file



Transform the contents into separate words (tokens)



Store the tokens in the database (index)

Indexing Engine



Find a file on NAS



Extract contents from the file

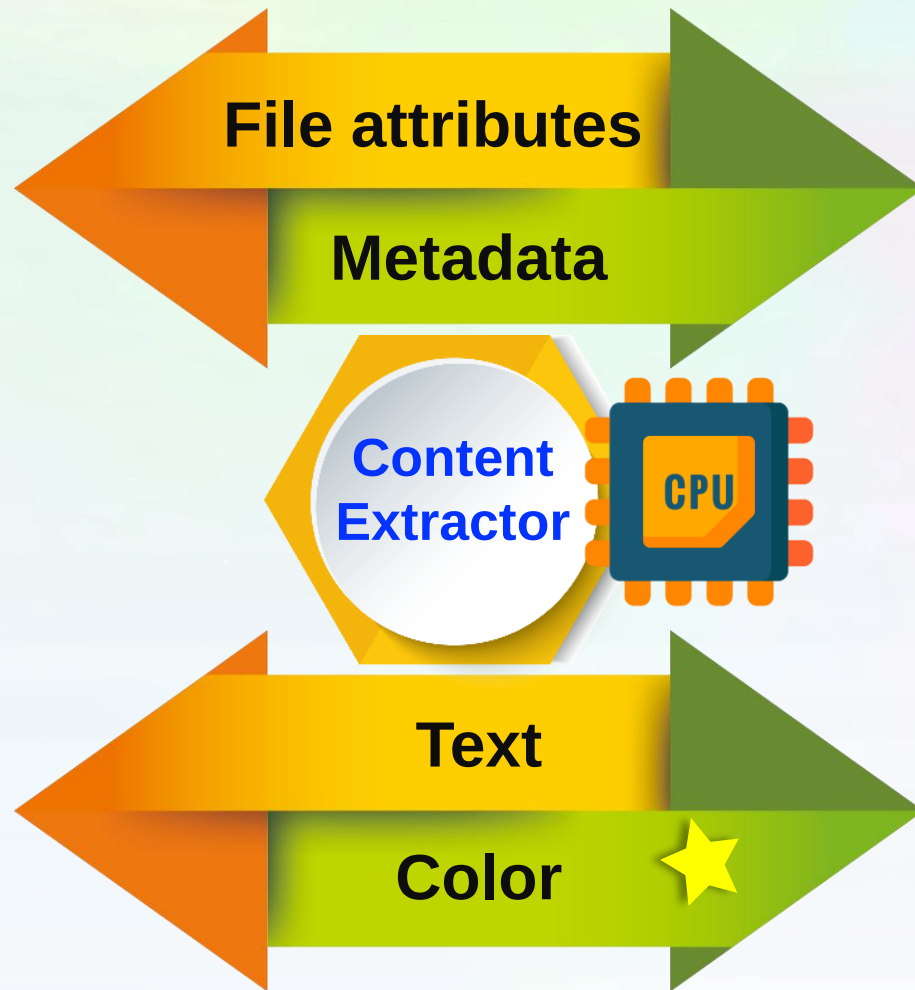


Transform the contents into separate words (tokens)



Store the tokens in the database (index)

Indexing Engine



agency-photographer-example

Path : 測試/Issues/agency-photographer-example.jpg

Description :

This statue of the 16th President of the United States depicts a 19 foot high seated Ab...

Lens model : 70.0-200.0 mm f/2.8

Author : Julie Doe

ISO equiv. : 100

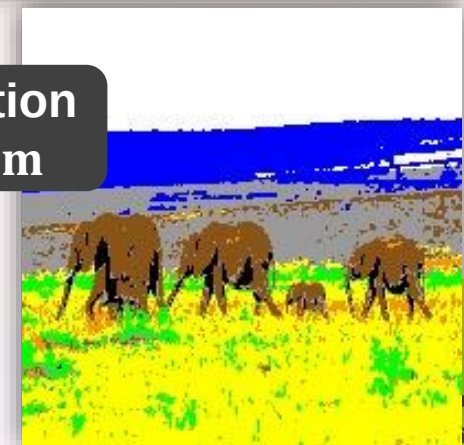
Camera model : NIKON D2X

Exposure time : 1/160

Metadata



Color distribution
Eyes → System



INAP

Indexing Engine



Find a file on NAS



Extract contents from the file



Transform the contents into separate words (tokens)



Store the tokens in the database (index)

Indexing Engine

Analyzer Module

Transform the text strings into tokens using NLP pre-processing methods.

Word segmentation

Stemming

Stop word removal

Original:

the quick brown foxes

Word segmentation:

the quick brown foxes

Stemming:

the quick brown foxes

Stop word removal:

the quick brown fox

Tokens:

quick brown fox

Indexing Engine



Find a file on NAS



Extract contents from the file



Transform the contents into separate words (tokens)



Store the tokens in the database (index)



Indexing Engine

Index
Writer

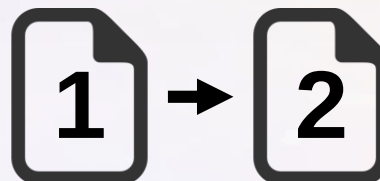
Inverted Index makes search more efficient!

RAM

quick



brown



fox



Dictionary

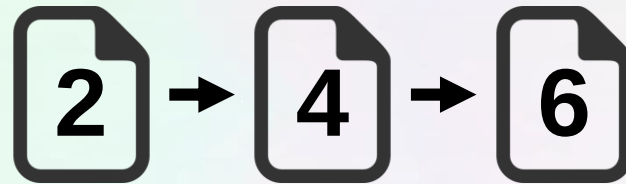
Postings

Indexing Engine

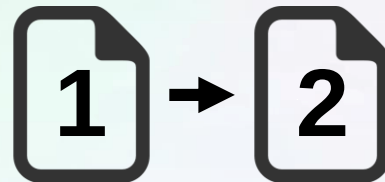
Index
Writer

Q. How to quickly retrieve search result using the inverted index?

quick



brown



fox



Dictionary

Postings



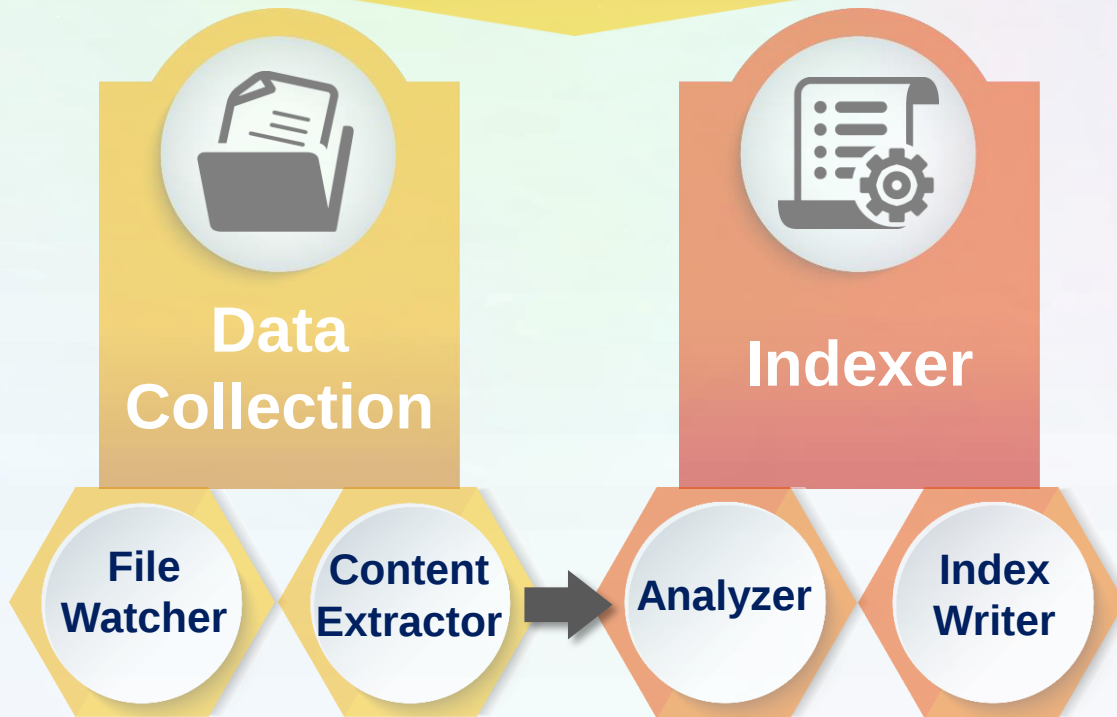
quick



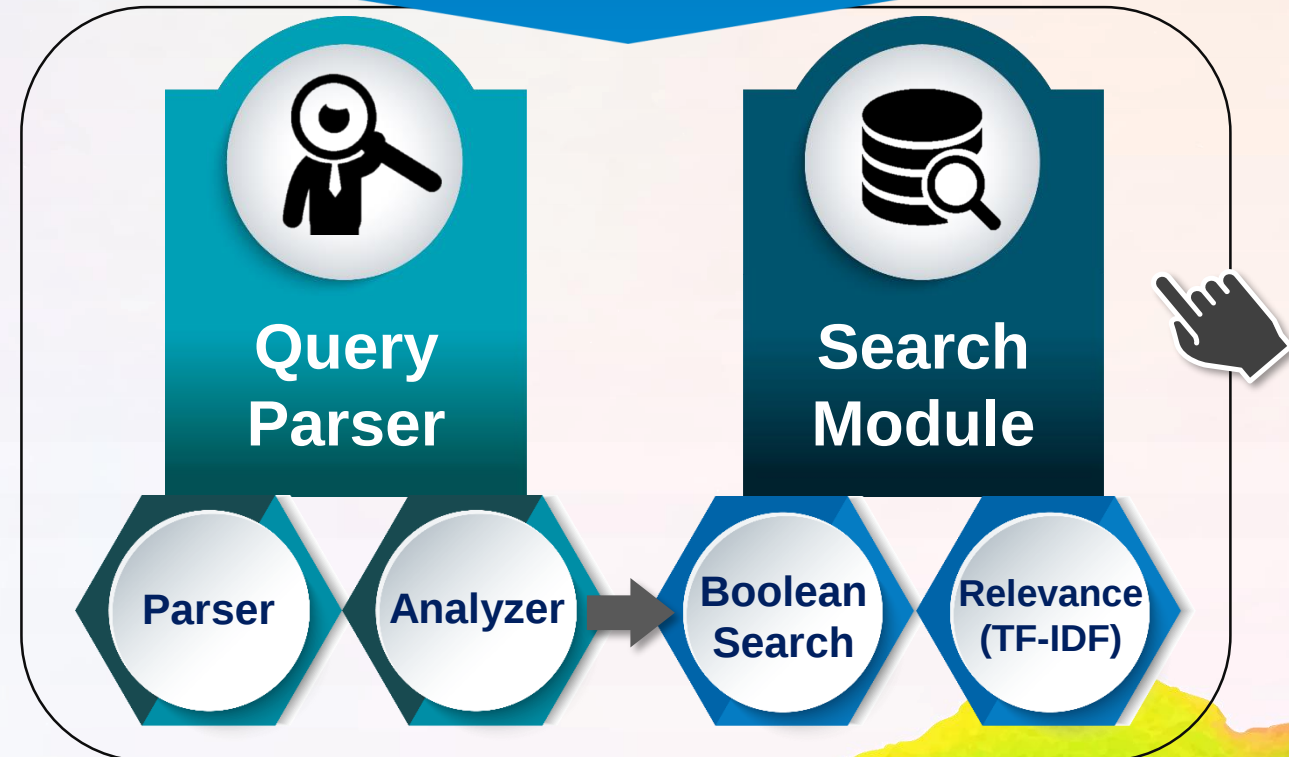
Indexing Engine



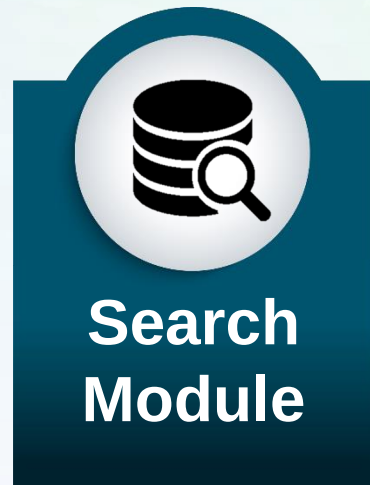
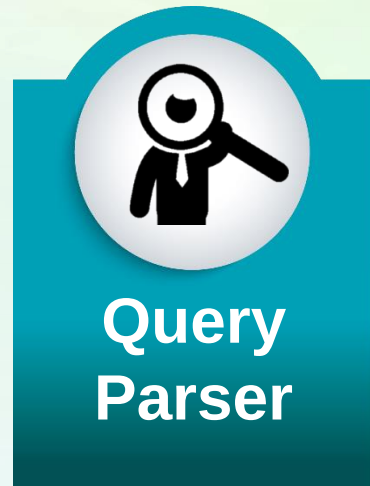
Indexing Engine



Search Operation



Search Operation



Interprets a query



Transform the query into tokens

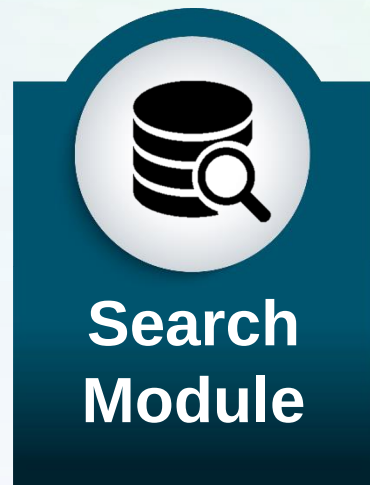


Find the relevant documents



Rank the search results using TF-IDF

Search Operation



Interprets a query



Transform the query into tokens

Find the relevant documents

Rank the search results using TF-IDF

Search Operation

Parser

User interface → search syntax

Advanced Search

Find pages with...

All of these words:

Taiwan

Exact word or phrase:

Any of these words:

Example: QNAP NAS

None of these words:

taipei 101

Narrow results by...

Category :

PowerPoint

Date modified :

--- Select a date range ---

Size :

> ▾

Type size here

KB ▾

Path :

▪ /Travel Plans 🗑

Browse

Search

path:"/Travel plans" AND taiwan AND -
"taipei 101" AND category:"PowerPoint"

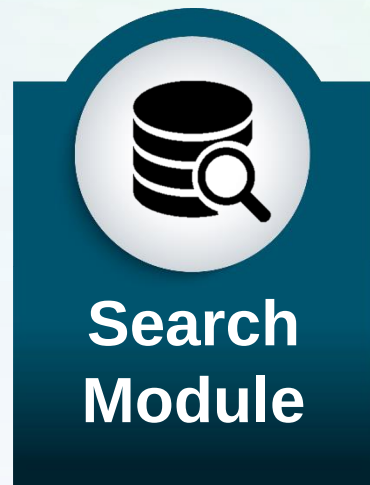
QNAP

Search Operation



Interprets a query

Transform the query into tokens



Find the relevant documents

Rank the search results using TF-IDF

Search Operation

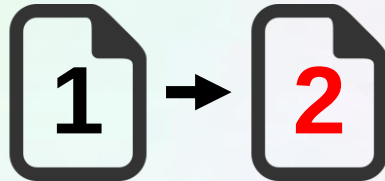
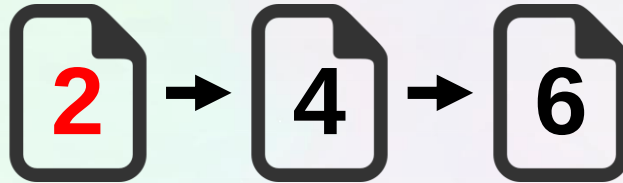
Boolean
Search

Retrieve the result efficiently
according to the search conditions!

quick

AND

brown



fox



Dictionary

Postings



quick brown



Search Operation

Boolean
Search

Retrieve the result efficiently
according to the search conditions!

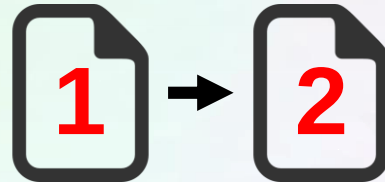
quick

OR

brown

fox

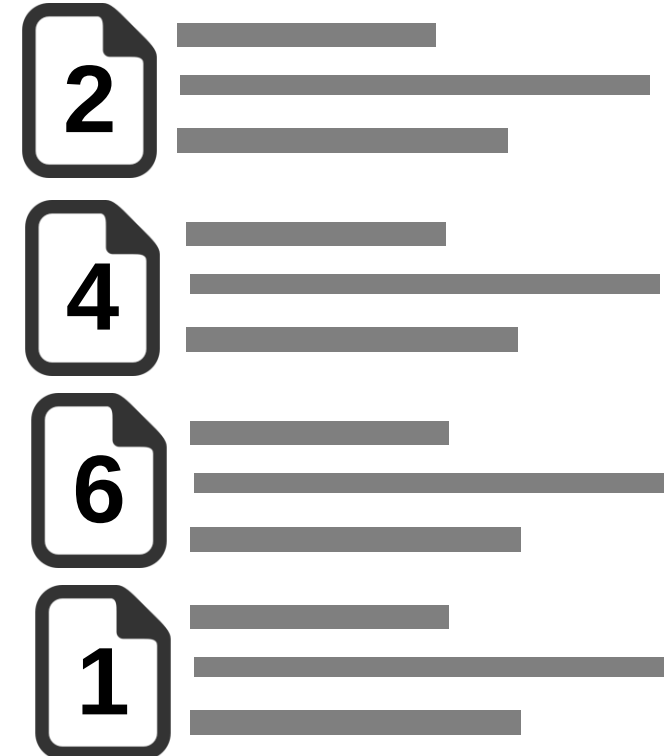
Dictionary



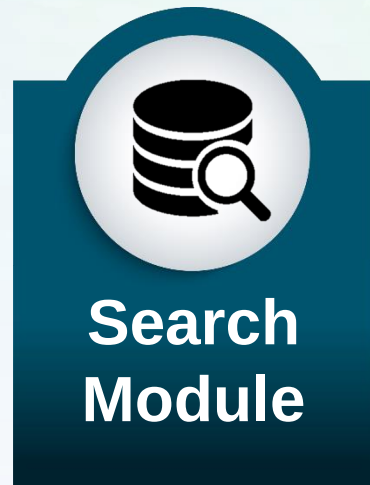
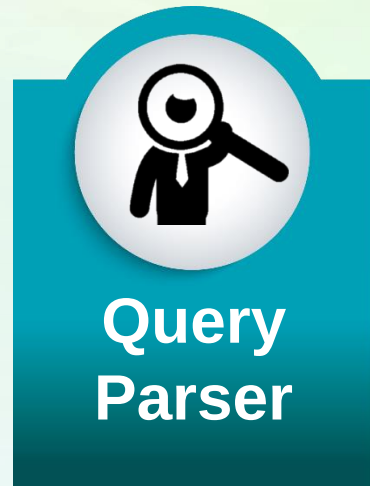
Postings



quick OR brown



Search Operation



Interprets a query



Transform the query into tokens



Find the relevant documents



Rank the search results using TF-IDF



Search Operation

Relevance
(TF-IDF)

TF-IDF is a statistical method in which a frequency based **weight** is assigned to a token to reflect its **importance**.

Q. How to utilize TF-IDF to sort search result by relevance?

QNAP OR CES



.....
...CES

CES.....
QNAP CES.....
.....

A

QNAP.....
.....QNAP...
.....QNAP.....

.....
.QNAP...QNAP
.....QNAP...
.....

B

.....
QNAP.....
.....QNAP.....
.....

CES.....
.....CES.....
.....

C

QNAP

Search Operation

A. Sorted by relevance: A, C, B

QNAP OR CES



.....
CES

CES.....
QNAP CES.....
.....

A

.....
QNAP.....
.....QNAP.....
.....

CES.....
.....CES.....
...

C

QNAP.....
.....QNAP...
.....QNAP.....

.....
QNAP...QNAP
.....QNAP...
.....

B

Relevance = TF × IDF

The more a token occurs in a document, **the higher the TF weight.**

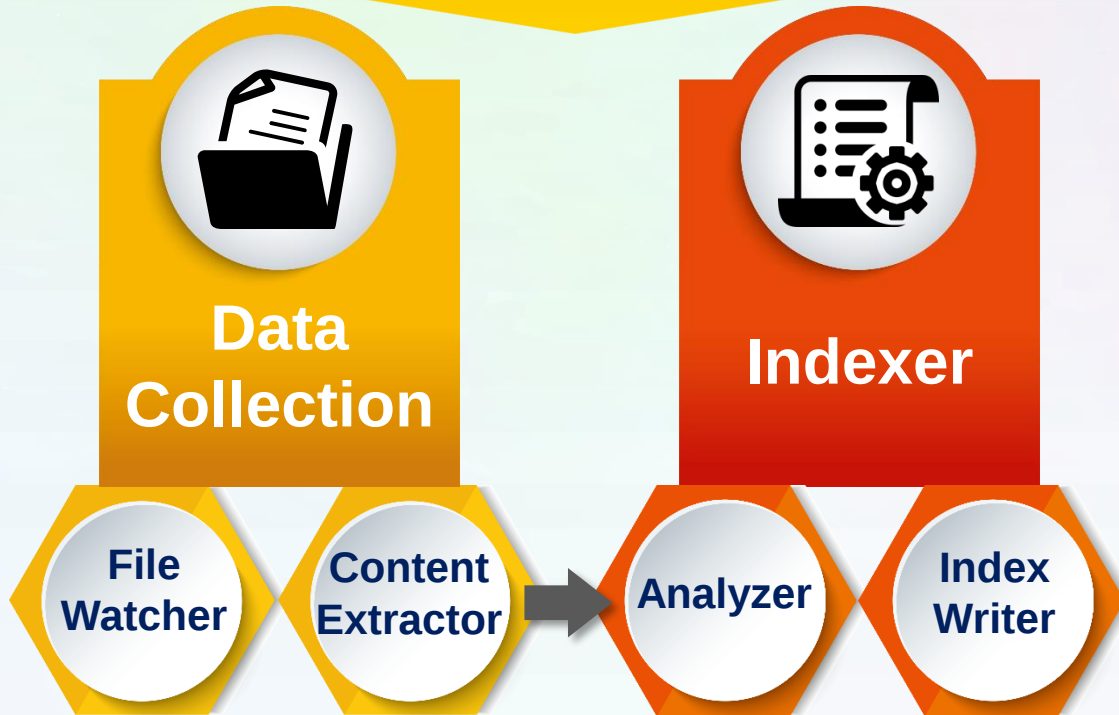
The more a token occurs in the entire set, **the lower the IDF weight.**

The TF-IDF algorithm is used to calculate the **relevance** of a document to a query.

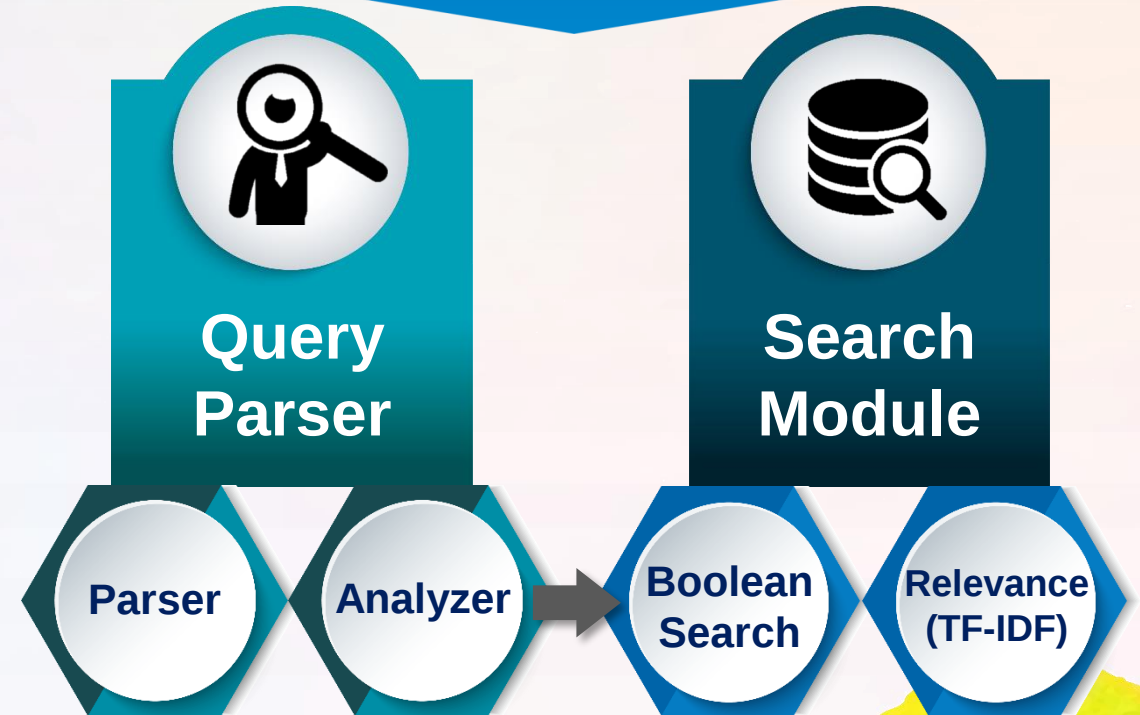
Qsirsch Architecture



Indexing Engine



Search Operation



The best partner for efficient work

Enterprise

High-capacity with exceptional performance



TS-1685

- 16-96 TB
- 16 bays
- Intel 6-core
- 128 GB RAM
- 6 M.2 SATA 6Gb/s SSD slots for caching or caching pools to accelerate system performance.

SMB

High-end business NAS for greater performance



TS - 877

- 4-64 TB
- 8 bays
- AMD Ryzen™ 6-core
- 8 GB RAM (Up to 64 GB)
- 2 M.2 SATA 6Gb/s SSD slots for caching or caching pools to accelerate system performance.

SOHO

High performance 4-core studio



TS - 453Be

- 4-24 TB
- 4 bays
- Intel Celeron quad-core
- 8 GB/ 4GB RAM

QNAP



Qsirch
is your best choice!

