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# **NaiveShark.com help**

***Release 1.0***

**NaiveShark**

June 10, 2015



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NaiveShark.com is an engineering community portal and open database of world-wide industrial [products](#). You are free to add your (or any) [organization](#) or [products](#) to [catalog](#), or extend existing information.

[Download documentation page](#).

Contents:



## 1.1 About

NaiveShark.com is an engineering community portal and open database of world-wide industrial [products](#). You are free to add your (or any) organization or products to [catalog](#), or extend existing information.

## 1.2 Who can use it?

- Engineers - to search for information about materials and products for their professional needs
- Industrial manufacturers - to public the information about their production
- Students - for learning
- Technical support professionals - for contacting with costumers
- Anyone!

Database is published on [NaiveShark.com](#) web-site, and supported by open [community](#) and [bots](#). If you are just searching, please, navigate the catalog and read about published product - all information are open for anyone. If you want to add some information - you are free to register and contribute.

## 1.3 How can I contribute?

After you has completed the free and simple registration on site, you can:

- Add new products and organizations to catalog
- Add or edit descriptions for existing products and organizations
- Add or edit property values to products and organizations
- Reorganize structure of catalog
- Add new quantity, property and measure units to reference

For rising popularity of NaiveShark community-driven portal, please, post the link to NaiveShark.com on any sites, forums, social networks, where any people can learn about it.

## 1.4 Version history

### 1.4.1 Version 0.5 “Hooktooth dogfish” 10 june 2015

- More sophisticated product searching - filter by metrical property amount and enumerated properties.

### 1.4.2 Version 0.4 “Smalleye pygmy shark” 26 may 2015

New features:

- Simple product searching - filter by name
- Web API for user notifications for desktop-client

### 1.4.3 Version 0.3 “Blurred lanternshark” - 13 apr 2015

New features:

- Images for enumerable property variant
- For metrical property - using the property default unit

### 1.4.4 Version 0.2 “Velvet belly lanternshark” - 03 apr 2015

New features:

- New statistics page - “New product count by date”
- New optional “Clarifying product” link for enumerable property variant.

### 1.4.5 Version 0.1.2 “Another one bite of pygmy ribbontail catshark” - 24 mar 2015

This is an another small update above 0.1 and 0.1.1 version.

New feature:

- Task search filters in project page

### 1.4.6 Version 0.1.1 “Weak bite of pygmy ribbontail catshark” - 13 mar 2015

This is a small update above 0.1 version.

New features:

- Edit the previously posted topic and topic comments (for authors)
- User notifications about topic changes

Fixed bug:

- Invited project member can't open the project to accept - if project is private.



### 1.4.7 Version 0.1 “Pygmy ribbontail catshark” - 06 mar 2015

Named as a one of smallest *Pygmy ribbontail catshark* species, version 0.1 introduce main new feature - [projects](#).

New feature:

- Private and public projects for our users. Project is a place to plan and discuss your engineer approaches, tasks, share file links for materials and results.

### 1.4.8 Version 0.0.6 “Weak bite of spined pygmy shark” - 07 feb 2015

This is a small update above 0.0.5 version.

New features:

- New *Talk* page for products, orgs and categories - for user discussions.

Changes:

- New separate command for *Ancestor product* field changing.
- View-Talk-Edit-Hitory commands are now tabpages in products, orgs and categories.

### 1.4.9 Version 0.0.5 “Spined pygmy shark” 20 jan 2015

Named as a one of smallest *Spined pygmy shark* species, version 0.0.5 introduce many new features:

- Description for category.
- Link type between product and organization: organization can be a designer of product, manufacturer, seller etc. - or all-in-one.
- Hierarchy of organization (structure of large holdings and corporations). Inactive flag for organization - for historical information.
- External codes for organizations (NYSE) and products - for linking with internet databases (PubChem, ChemSpider, ZINC, ChEBI on-line chemical databases).
- AJAX-widget for selecting product via filtered select-box: in editing BOM, linking with products - in any places where large list of product are exist in select-box fields.
- Amount value extended in metrical properties. Now it can be integer, float, fraction and proportion value, with =, =< or < conditions.
- Site statistic page ( Product and org total count, Product count by categories, Latest added/modified products and Most used templates pages).
- RSS feed for Latest added/modified products
- Wikipedia [keyword](#) and list of Wikimedia Commons images for category, product or org.
- List of inherited products now paged as thumbnail grid

### 1.4.10 Version 0.0.4 “Dwarf lanternshark” 18 nov 2014

Named as a name of smallest *Dwarf lanternshark* species, version 0.0.4 is a site release with base working functionality for product and organization descriptions.

- New web link fields for product, organization and for product page on organization site.
- In product page now showing the full path to through product inheriting path.

- Linking organization to product now available on product page.

#### **1.4.11 Version 0.0.3 “Soaring on the seabed” 09 nov 2014**

- New “Send feedback” command in main menu
- Changes on quantity page in units list: unit with factor=1 (in main cases this is a base unit for this quantity) is highlighted.
- New measurement conditions option for measured properties for product.
- In the list of properties on product page - links to property reference has added. In property page in reference - list of used products (with amount and links) has added.

#### **1.4.12 Version 0.0.2 “Deep currents” 06 nov 2014**

- Add: Relations between products (“Required accessories”, “Repair parts”)
- Fixed error in BOM editor (“amount max” is optional parameter now)

#### **1.4.13 Version 0.0.1 “Call from the abyss” 27 oct 2014**

First release with basic functions:

- User profiles
- Catalog structure
- Products with properties
- Organizations
- Full-text search
- Full history of data editing
- WYSIWYG Editor for descriptions, with rich text formatting, image and video embedding.
- SharkBot

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### How to

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#### 2.1 How can I do...

- ... sign up? Registration are free - use the Sign up button in main site menu.
- ... add new product? Sign up, search wanted category in catalog, hit the 'Add a product' button, fill the form and hit Save button.



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### Catalog

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Catalog is a tree of categories, containing the [products](#) and [organizations](#). Catalog root placed on site home page.



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## Organization

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Organization is some kind of factory, plant, corporation or some other type of industrial, engineering or trading organization, which creates [production](#).

Here is an example with [NaiveShark organization profile](#) on site.

### 4.1 Linked orgs

For each organization you can define the list of subsidiaries (acquisition) organization - structure of large holding or corporation, for example. For each subsidiary host organization will be shown as Parent. Each organization can contain unlimited list of subsidiaries, and can have a several parents (for complex form of ownership).

### 4.2 Linked products

List of [products](#), linked with this organization. You can assign the local (manufacturer) code for product for this organization (local trade-name), and url to product page on organization web-site. Also, you can check the Role of organization to this product (Design, Manufacture, Sell, Supply, Service and Utilization flag available).

#### 4.2.1 Local code

See example [DuPont](#):

- PTFE - product short name
- Polytetrafluoroethylene - product full name
- Teflon - product trade-mark of DuPont

### 4.3 Example

For example - [DuPont](#)

## DuPont

Full name : DuPont

Website: <http://www.dupont.com> 

NYSE: [DD](#)

Wikipedia link: [DuPont](#)

[edit](#) [History](#)

### External images



### Linked orgs

#### Subsidiaries and acquisitions

[Add a sub org](#)

### Linked products

Local code	Product	Website	Design	Manufacture	Sell	Supply	Service	Utilization	
Teflon	PTFE Polytetrafluoroethylene			+					<a href="#">Edit</a> <a href="#">Exclude</a>

[Add a linked product](#)

### Category

[Materials](#) / [Polymers](#)

Screen-shot taken at 20 jan 2015.

Parameter	Value
Organization full name	DuPont
Web-site	<a href="http://www.dupont.com/">http://www.dupont.com/</a>
NYSE code	DD (auto converted to <a href="https://www.nyse.com/quote/XNYS:DD/">https://www.nyse.com/quote/XNYS:DD/</a> link)
Wikipedia keyword	DuPont (auto converted to <a href="https://en.wikipedia.org/wiki/DuPont">https://en.wikipedia.org/wiki/DuPont</a> link)
External images (taken from <a href="#">Wikimedia commons</a> )	DuPont . svg
Subsidiaries and acquisitions	not listed
Linked products	PTFE Polytetrafluoroethylene (DuPont trade-name - Teflon). DuPont marked as manufacturer of this product

Each organization should be assigned to [category](#).



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## Product

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Product is a central part of database. Product mean industrial products, product's family, materials and other types of productions.

Each product can have a list of \* *Product properties*.

Each product should be assigned to *category*.

### 5.1 Product code and name

Product short name (code) are optional. Use it for common abbreviation or system identifier of product.

Name is required field and contain full name of product.

Example - look at [PVC](#) page. PVC is a short name, Polyvinyl chloride - full name.

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**Note:** Use short name and full name for correct, regular naming. For organization-specific trade-name (or manufacturer code) use the `local code` field in `linked org's list`! See more [Local code](#).

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### 5.2 External code

For each product you can assign the code for linking with external on-line databases. Now available 4 chemical databases (use it for chemical products and substances):

- PubChem
- ChemSpider
- ZINC
- ChEBI

Example from [Unsymmetrical dimethylhydrazine](#) page:

External database	Example of code	Resulting link (auto generating)
PubChem	5976	<a href="http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5976">http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5976</a>
ChemSpider	5756	<a href="http://www.chemspider.com/Chemical-Structure.5756.html">http://www.chemspider.com/Chemical-Structure.5756.html</a>
ZINC	no data	
ChEBI	18853	<a href="https://www.ebi.ac.uk/chebi/searchId.do?chebiId=18853">https://www.ebi.ac.uk/chebi/searchId.do?chebiId=18853</a>

## 5.3 Product templates and inheriting

Each product can have the list of inherited products. In real world it's mean what:

- 'product1' (child) are designed based on 'product2' (parent) OR
- 'product2' (parent) is a product-family, and 'product1' (child) are product from this family.

Child product inherits the properties from child - and can overwrite it values.

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**Note:** Do not confuse inheriting and BOM! *Inherit* - mean *designed based on*. *BOM* mean *included to assembly*!

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You can mark parent product as 'template'. This mean what it used as basic pattern for ease the data filling of inherited product. Use it for basic (abstract) products or for product family.

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**Tip:** Look at [Most used templates](#) page on site.

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### 5.3.1 Examples from base - PVC

## PVC Polyvinyl chloride

Short name : PVC

Full name : Polyvinyl chloride [Template](#)

Ancestor product : [Basic material template](#) \ [Basic polymer template](#) \

Wikipedia link: [Polyvinyl chloride](#) [↗](#)

[Edit](#) [History](#)

## Inheritor products (first level)



PVC Polyvinyl chloride  
(rigid)



PVC Polyvinyl chloride  
(flexible)

Page 1 of 1.

[Create new inheritor](#)

## External images



Screen-shot taken at 20 jan 2015.

Polyvinyl chloride product template have two inherited product:

- Polyvinyl chloride (rigid)
- Polyvinyl chloride (flexible)

Some properties (melting point, for example) of rigid and flexible PVC are equal to base PVC, and some properties (density, for example) - are not equal.

### 5.3.2 Examples from base - A320neo

A320neo product have two editions:

- A320neo with Pratt & Whitney turbofan engine
- A320neo with CMF turbofan engine

In real world A320neo is a family, and each airline species should be with PW or CMF engine, which mean different BOM and technical specification for each of them.

### 5.3.3 Examples from base - Basic material template

Some templates hierarchy could be very complex - see [Basic material template](#) for example. Such abstract template can't contain precise values - only list of common properties.

## 5.4 Product properties

Each product can have a list of measurable and enumerable properties. Property value can be own by itself or inherited from parent product.

- *Measurable parameters*
- *Enumerable parameters*

For overview - see the screen-shot of example [102NU70 Bipolar transistor](#).

# 102NU70

Full name : 102NU70

Ancestor product : Basic transistor template \ Basic Bipolar junction transistor template \ Basic Bipolar junction NPN transistor template \

[Edit](#) [History](#)

No inheritor products currently.

[Create new inheritor](#)

## Metrical properties

Property	Amount	Amount unit		
Maximum collector power dissipation (Pc) of BI transistor <sup>?</sup>	50 (50.0)	mW	Overridden	<a href="#">Edit</a>
Maximum collector-emitter voltage (Uce) <sup>?</sup>		V	Inherited	<a href="#">Edit</a>
Maximum collector-base voltage (Ucb) <sup>?</sup>	20 (20.0)	V	Overridden	<a href="#">Edit</a>
Maximum emitter-base voltage (Ueb) <sup>?</sup>		V	Inherited	<a href="#">Edit</a>
Maximum collector current (Ic) <sup>?</sup>	100 (100.0)	mA	Overridden	<a href="#">Edit</a>
Maximum junction temperature (Tj) <sup>?</sup>	90 (90.0)	C	Overridden	<a href="#">Edit</a>
Maximum collector capacitance (Cc) <sup>?</sup>		pF	Inherited	<a href="#">Edit</a>
Transition frequency (ft) <sup>?</sup>	500 (500.0)	kHz	Overridden	<a href="#">Edit</a>
Forward current transfer ratio (hFE) <sup>?</sup>	12 (12.0) — +20.0	-	Overridden	<a href="#">Edit</a>

[Add property](#)

## Enumerable properties

Property	Value		
Bipolar junction transistor structure <sup>?</sup>	NPN	Inherited	<a href="#">Edit</a>
Transistor material <sup>?</sup>	Ge	Overridden	<a href="#">Edit</a>
Transistor packages <sup>?</sup>	TO1	Overridden	<a href="#">Edit</a>
Transistor pin assignments <sup>?</sup>	None	Inherited	<a href="#">Edit</a>

[Add property](#)

Screen-shot taken at 20 jan 2015.

- Inherited - value are equal to same value in parent product
- Overridden - property inherited from parent, but value are different
- Own - property doesn't inherited

### 5.4.1 Measurable parameters

- [Measurable property type](#)
- Amount equality type ( = by default, <= or < )
- Amount (integer, float, fraction, proportion) with optional equality type ( = equal by default, => great or equal, < great )
- Maximum amount (integer or float)
- Engineering tolerance (integer or float)
- Unit
- Measurement condition ( *Measurement conditions in properties* )

Amount can be:

Numerical type	Example 1	Example 2
Integer	125	-15487000
Float	154.48	-7e8
Fraction	1/9	-4 3/4
Proportion	1:8	7:9

### 5.4.2 Enumerable parameters

- [Enumerable property type](#)
- Value

## 5.5 BOM

Bill of materials for this product.

- Position (optional)
- Subproduct
- Amount
- Unit (optional)

## 5.6 Related

Each product can have a related - as accessory, repair part etc.

## 5.7 Linked orgs

List of organizations, linked with product - manufacturers, sellers etc. Described in [Organization linked product](#) page.

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# Property

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Property is a portion of information about some [product](#). For example, turbofan engine has ‘fan diameter’, ‘static thrust’ and ‘bypass ratio’ (and many more) properties. All structured properties can be one of two kinds:

- Measurable property
- Enumerable property

## 6.1 Measurable property

### 6.1.1 Quantity

Each measurable property are derived from physical Quantity. For example, basic physical quantity Length are used for several product properties - Width, Range of a projectile, Maximum range, Typical measuring range etc. Each quantity have a list of units - for Length it's a metre, inch, yard etc. All units in one Quantity can be easily converted to each one.

Here is an example [Quantity: Length](#) on site.

## Quantity: Length

[edit](#)

### Units

Short name	Full name	Factor	Shift scale	
m	metre	1.0	None	<a href="#">Edit</a>
mm	millimetre	0.001	None	<a href="#">Edit</a>
cm	centimetre	0.01	None	<a href="#">Edit</a>
km	kilometre	1000.0	None	<a href="#">Edit</a>
in	inch	0.0254	None	<a href="#">Edit</a>
ft	foot (international)	0.3048	None	<a href="#">Edit</a>
yd	yard (international)	0.9144	None	<a href="#">Edit</a>

[+Create unit](#)

### Properties

Full name	Default unit
<a href="#">Length</a>	m
<a href="#">Range of a projectile</a>	m
<a href="#">Maximum range, fully loaded</a>	m
<a href="#">Altitude</a>	m
<a href="#">Service ceiling</a>	m

Screen-shot taken at 30 jan 2015.

Unit m (metre) marked as base with `Factor = 1`. This mean what all units for this quantity are based from metre - for example, kilometre has a `Factor = 1000` (one thousand metres).

Users can extend list of quantities, units and properties.

### 6.1.2 Property

See an example Property: [Maximum range, fully loaded](#) on site.



## Physical property: Maximum range, fully loaded

Default unit: m (metre)

[edit](#)

### Measurement conditions

Fixed property	Amount	Unit
<a href="#">+Create measurement condition</a>		

### Used as measurement condition

No use currently.

### Used in products

Product	Amount	Unit
<a href="#">Jet airliner template</a>		km
<a href="#">A320neo</a>	6900 (6900.0)	km
<a href="#">A320neo with Pratt &amp; Whitney</a>	6900 (6900.0)	km
<a href="#">A320neo with CMF</a>	6900 (6900.0)	km

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[Properties](#) / [Quantity](#) / [Length](#) / Maximum range, fully loaded

Screen-shot taken at 30 jan 2015.

This property based on `Length` quantity, and used in some products.

### 6.1.3 Measurement conditions in properties

Measurement condition mean what some amount of this property for some product could be measured only in some condition.

See an example [Property: Cruising speed](#) on site.

## Physical property: Cruising speed

Default unit: km/h (Kilometre per hour)

[edit](#)

### Measurement conditions

Fixed property	Amount	Unit	
Altitude <sup>?</sup>	11000.0	m	<a href="#">Edit</a>

[+Create measurement condition](#)

### Used as measurement condition

No use currently.

### Used in products

Product	Amount	Unit
<a href="#">Jet airliner template</a>		km/h
A320neo	828 (828.0) (at Altitude 11000.0 m)	km/h
<a href="#">A320neo with Pratt &amp; Whitney</a>	828 (828.0) (at Altitude 11000.0 m)	km/h
<a href="#">A320neo with CMF</a>	828 (828.0) (at Altitude 11000.0 m)	km/h

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[Properties](#) / [Quantity](#) / [Velocity](#) / [Cruising speed](#)

Screen-shot taken at 30 jan 2015.

Cruising speed for airliner could be measured precisely only if `Altitude` value are fixed.

## 6.2 Enumerable property

Enumerable property is a parameter with list of predefined values. For example, 'IP' (Ingress Protection Rating) can be 'IP22', 'IP67' etc.

Here is an example [Enumerable property: IP](#) on site.

Users can extend list of enumerable properties and values.

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# Project

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Project is a place to plan and discuss your engineer approaches, collaborate to colleagues, track the tasks, share file links for materials and results.

Private projects are visible only for members.

Public projects are visible for everyone (for anonymous visitors too).

Project admin can switch project *Private* flag at any time.

## 7.1 Members

List of users in your project team. You (or another project admin) can invite users to join with *Add member* button. User got notification and could accept your invite.

## 7.2 File link area

Site does not provide the file storage for your projects. You can to organize your own online storage with several external services, and put instructions for project members here.

## 7.3 Product list

Admin can create product list. Project members can add [products](#) to list.

This useful to get the quick access to products, related to your project. For example, this can be a list of existing products, modified in your design.

## 7.4 Milestones

Admin can create and edit project milestones. Milestone can contain only text title, or plan and fact date.

## 7.5 Tasks

Task is a way to organize your work, describe the goals, assign task to project members (or to yourself). Task can be linked with another tasks and targeted to milestones.

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### Bots

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Bot is a virtual person on NaiveShark.com, used to sign the history of automatically loaded data.

First of it : [SharkBot profile](#) on site.



## Wikipedia usage

For each [category](#), [product](#) and [organization](#) you can easily provide the Wikipedia keyword and list of Wikimedia commons images.

### 9.1 Example - Turbofans category

Turbofans category is an example.

#### 9.1.1 View category



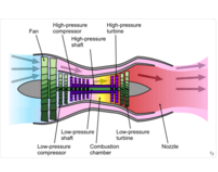


[Home](#) / [Engines](#) / Turbofans

The turbofan is a type of airbreathing jet engine

Wikipedia link: [Turbofan](#)

[Edit](#) [History](#)

### External images


### Sub category list


[+Add a New sub Category](#)


No sub categories currently in category.


### Product list

[+Add a Product](#)


[Turbofan engine](#)


[Geared turbofan engine](#)


[Garrett TFE731](#)

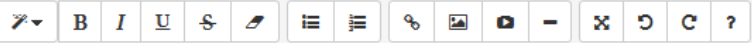

[Lycoming ALF 502](#)

Screen-shot taken at 21 jan 2015.

### 9.1.2 Edit category

Name!

Description



The turbofan is a type of airbreathing jet engine

Wikimedia img list

Turbofan operation (lbp).png  
Ge cf6 turbofan.jpg  
Turbo-Union RB199 turbofan engine.jpg  
Klimov RD-33 turbofan engine.JPG  
Air-ftd-md90-02-ar-8.jpg

Wiki keyword

Save

Screen-shot taken at 21 jan 2015.

### 9.1.3 Wiki keyword

*Wiki keyword (Turbofan)* is a English Wikipedia article name. Full link (<https://en.wikipedia.org/wiki/Turbofan>) generated automatically.

### 9.1.4 Wikimedia Commons image list

*Wikimedia img list* is a list of images you can found at [Wikimedia Commons](#).

Turbofan operation (lbp).png  
Ge cf6 turbofan.jpg  
Turbo-Union RB199 turbofan engine.jpg  
Klimov RD-33 turbofan engine.JPG  
Air-ftd-md90-02-ar-8.jpg


Images are hosted at Wikimedia Commons, and reuses under [Commons:Reusing content outside Wikimedia](#) rule.

To take the image name from Wikimedia Commons you need:



1. Find wanted image on Wikimedia (for example, [http://commons.wikimedia.org/wiki/File:Klimov\\_RD-33\\_turbofan\\_engine.JPG](http://commons.wikimedia.org/wiki/File:Klimov_RD-33_turbofan_engine.JPG))
2. Select the file name (Klimov RD-33 turbofan engine.JPG) and copy to clipboard (after word *File:* as pictured)
3. Insert file name to *Wikimedia img list*. Each file name in separated line.

commons.wikimedia.org/wiki/File:Klimov\_RD-33\_turbofan\_engine.JPG



**WIKIMEDIA COMMONS**

Main page  
Welcome  
Community portal  
Village pump  
Help center

Выбор языка  
English  
Выбрать

Participate  
Upload file  
Recent changes  
Latest files  
Random file  
Contact us

Tools  
What links here  
Related changes  
Special pages  
Printable version  
Permanent link  
Page information  
Nominate for deletion


File Discussion

**File:Klimov RD-33 turbofan engine.JPG**

Wikimedia Commons

From Wikimedia Commons, the free media repository

File File history File usage on Comm



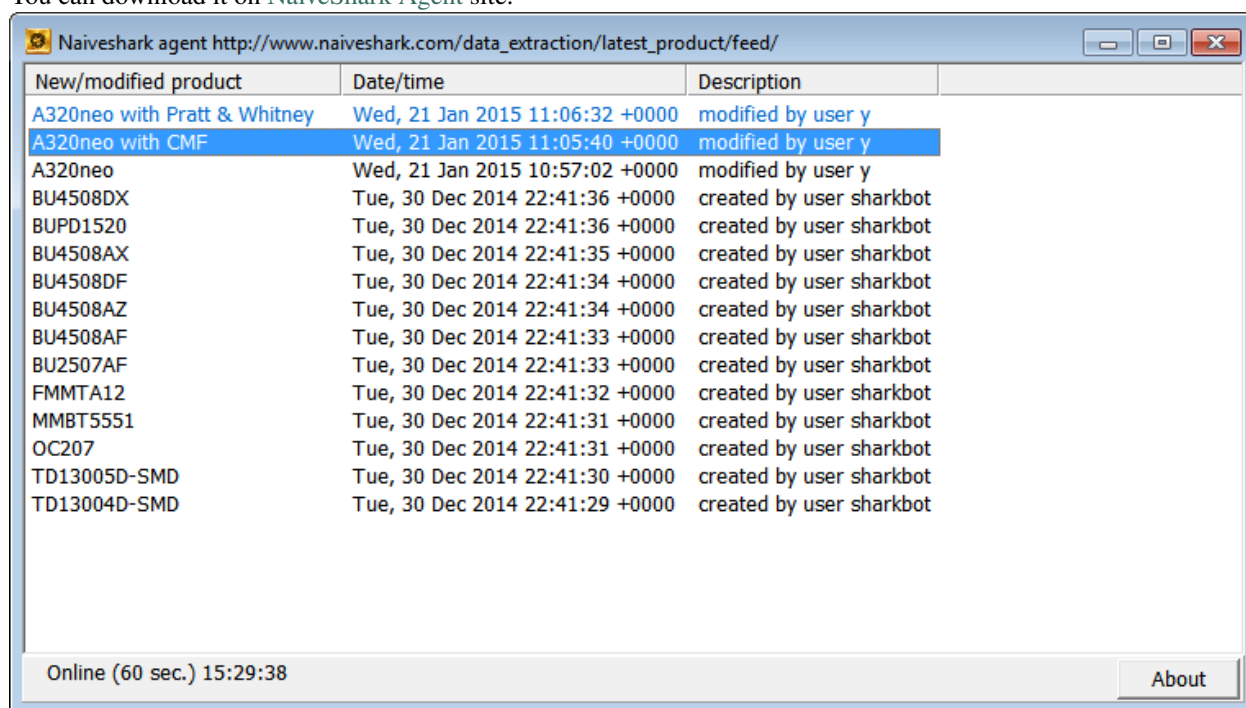
Size of this preview: 800 × 600 pixels. Other resolutions: 320 × 240 pixels | 640 × 480 pixels | 1,024 × 768 pixels | 1,280 × 960 pixels.



## Naiveshark agent for Windows

Naiveshark Agent is a small freeware Windows program, which keep you informed about data changes on main [NaiveShark.com](http://www.naiveshark.com) site.

You can download it on [NaiveShark Agent](http://www.naiveshark.com) site.



Screen-shot taken at 21 jan 2015.



I

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