Reports Plugin

LimeSurvey Reports Plugin

The `Reports` plugin creates public, shareable reports for LimeSurvey surveys. Reports are accessed through UUID-based URLs and display completed survey responses as charts, numerical summaries, and answer tables.

Requirements

- LimeSurvey 6.x or 7.x
- PHP 8.3 or higher
- An active survey with a response table

The same plugin package supports both LimeSurvey major versions. Response tables and question fields are resolved through LimeSurvey so reports continue to work with the field-name and response-table changes introduced in LimeSurvey 7.

The submit-date filter and scheduled report-link emails use LimeSurvey's global time configuration. LimeSurvey 6 uses the configured server-time adjustment, while LimeSurvey 7 stores new response timestamps in UTC and uses the configured display timezone. Existing LimeSurvey 6 timestamps are not rewritten by this plugin after an upgrade to LimeSurvey 7.

Plugin Installation

- Upload the plugin at the LimeSurvey Plugin Manager.
- Activate the plugin in the LimeSurvey Plugin Manager (superadmin rights required).
- Configure the global plugin settings as described below.
- Enable the plugin per survey in the survey-level plugin settings.

Features

Features are grouped by purpose. Within each group, features from the Free Package are listed first, followed by additions in the Advanced Package and Expert Package.

Report creation and access

Free Package

- Public and shareable reports identified by UUID
- Automatic creation of a default report when a survey is activated
- Manual creation, editing, activation, deactivation, and deletion of reports
- Minimum completed-response threshold
- Per-question control over whether a question is included in reports

Advanced Package

- Print control
- Language-specific report URLs and a language switcher for multilingual surveys
- Dynamic filters based on Single Choice questions
- Multiple selections within each filter question

Expert Package

- Optional report validity period

- Submit-date filter for non-anonymous surveys

Charts and result presentation

Free Package

- Pie, bar, column, and 100% stacked bar charts
- Configurable global chart type for list-style questions
- Optimized default chart palette for black chart labels
- Fullscreen control
- Percentage and absolute response counts in chart tooltips
- Collapsible question groups

Advanced Package

- Optional PNG chart export through the ApexCharts toolbar
- Mean and response count for numerical and scale questions
- Static response base per question
- Collapsible text answer lists with a configurable threshold

Expert Package

- Per-question chart type override
- Optional SVG and CSV chart exports through the ApexCharts toolbar
- Mean and response count per subquestion for multiple numerical questions
- Optional answer colors supplied by a compatible custom design plugin

Administration and notifications

Free Package

- Global report administration and survey-specific report lists

Advanced Package

- Removal of orphaned reports whose surveys no longer exist

Expert Package

- Email notification when a report is created
- Scheduled email notification on a configured date or when a survey expires

Package Feature Matrix

The plugin is built from one shared codebase and released as Free Package, Advanced Package, and Expert Package.

Feature	Free	Advanced	Expert
Public report links	Yes	Yes	Yes
Minimum response threshold	Yes	Yes	Yes
Global default chart type for list questions	Yes	Yes	Yes
Answer filters in the online report	No	Yes	Yes
Multi-select filter logic, shareable filter URLs, reset control, and filtered response count	No	Yes	Yes
Report language URL parameter	No	Yes	Yes
Report language dropdown	No	Yes	Yes
Print button	No	Yes	Yes
Restricted report access for administrator or token-based access	No	Yes	Yes
Collapsible text answer lists	No	Yes	Yes

Feature	Free	Advanced	Expert
Configurable collapse threshold for text answer lists	No	Yes	Yes
Static response base per question	No	Yes	Yes
Mean values for scale, matrix, and numerical reports	No	Yes	Yes
Purge orphaned reports	No	Yes	Yes
PNG chart export	No	Yes	Yes
Date/Time questions	No	Yes	Yes
Array Numbers questions	No	Yes	Yes
Array Texts questions	No	Yes	Yes
Submit-date filter	No	No	Yes
Per-question chart type override	No	No	Yes
SVG and CSV chart exports	No	No	Yes
Report validity period	No	No	Yes
Custom report designs and templates	No	No	Yes
Custom answer colors by question type and answer code	No	No	Yes
Report link email notifications	No	No	Yes
Multiple report link email recipients	No	No	Yes
Scheduled report link email notifications	No	No	Yes

Supported Question Types by Package

The following LimeSurvey question types have dedicated report renderers. The package columns show in which edition each question type is available.

Question type	Code	Free	Advanced	Expert
List (Radio)	`L`	Yes	Yes	Yes
List (Dropdown), including Bootstrap Dropdown and Image Select	`!`	Yes	Yes	Yes
Multiple choice	`M`	Yes	Yes	Yes
Array	`F`	Yes	Yes	Yes
Array (5 point choice)	`A`	Yes	Yes	Yes
Long free text	`T`	Yes	Yes	Yes
Yes/No	`Y`	Yes	Yes	Yes
5 point choice	`5`	Yes	Yes	Yes
Short free text	`S`	No	Yes	Yes
Huge free text	`U`	No	Yes	Yes
Numerical input	`N`	No	Yes	Yes
Date/Time	`D`	No	Yes	Yes
Array (Yes/No/Uncertain)	`C`	No	Yes	Yes
Array (Increase/Same/Decrease)	`E`	No	Yes	Yes
Array (10 point choice)	`B`	No	Yes	Yes
Array Numbers	`:`	No	Yes	Yes
Array Texts	`;`	No	Yes	Yes
Gender	`G`	No	Yes	Yes
List with comment	`O`	No	Yes	Yes
Array by column / dual scale	`1`	No	No	Yes
Multiple short text	`Q`	No	No	Yes
Multiple numerical input	`K`	No	No	Yes

Date, Matrix Number, and Matrix Text Reports

Available in Advanced and Expert.

Date/Time questions

Date/Time questions (`D`) are evaluated depending on the submitted values:

- If all valid answers are pure dates without a real time component, at least one date occurs more than once, and there are no more than 30 distinct dates, the report displays a chronologically sorted Bar chart.
- If the values contain real time components, mixed/invalid date formats, or more than 30 distinct dates, the report displays the answers as a list instead.
- Empty values are ignored.
- Invalid or mixed date values are kept as raw values in the list view.
- Pure date values are displayed using the LimeSurvey/admin date format.

Array Numbers questions

Array Numbers questions (`:`) are displayed as a matrix table. For each matrix cell, the report calculates:

- the mean value;
- the valid response count for that cell.

Empty values are ignored.

Array Texts questions

Array Texts questions (`;`) are displayed as grouped matrix text tables:

- each matrix row is shown as a separate section;
- the original matrix columns are preserved;
- text answers are listed per matrix cell;
- empty values are ignored;
- long answer lists use the existing collapse threshold setting.

Custom Answer Colors

Available in Expert.

Compatible custom design plugins can provide answer colors per LimeSurvey question type and answer code.

The color key format is:

```
<questionType>:<answerCode>
```

Examples:

```
5:1=>#708e15
A:1=>#b6c235
B:10=>#007377
Y:Y=>#34d399
G:F=>#d93a97
L:1=>#708e15
M:SQ001=>#34d399
```

The `questionType` part uses the concrete LimeSurvey question type code listed above. This allows different color schemes for question types that may share the same answer codes, for example `F:1`, `A:1`, `B:1`, and `5:1`.

Dynamic Report Filters

Available in Advanced and Expert.

Single Choice questions of type List (Radio) (`L`) can be displayed as filters above the report.

To configure a filter question:

1. Open the question in LimeSurvey. 2. Open its advanced settings or question attributes. 3. Find the `Reports` attribute group. 4. Enable Use as filter question. 5. Open the report and select one or more answers in the filter bar.

Selecting or clearing a checkbox automatically reloads the report. The filter bar also displays the number of matching respondents and provides a link to reset all active filters.

Filter logic

- Multiple selected answers within the same question are combined with `OR`.
- Filters from different questions are combined with `AND`.
- Only completed responses are included.
- Active filters are stored in the report URL as GET parameters, so a filtered report can be shared or bookmarked.
- Filter question codes and answer values are sanitized before they are applied to the response query.

Example: Selecting `Germany` and `Austria` for the country question and `Female` for the gender question returns completed responses matching:

```
(Country = Germany OR Country = Austria) AND Gender = Female
```

Response Base per Question

Available in Advanced and Expert.

Each reported question displays a static response base in the question header, for example `n = 120`.

The base is calculated per question type:

- Single-answer questions such as List (Radio), List (Dropdown), Yes/No, Gender, 5 point choice, and numerical input count non-empty answers for the question.
- Array and multiple-input questions count respondents with at least one non-empty subquestion value.
- Array by column / dual scale questions count respondents with at least one non-empty value in either scale.
- Multiple choice questions use the number of completed responses included in the report as their base, because each answer option is evaluated as a separate selected/not-selected field.
- Empty answer records and LimeSurvey no-answer values are not counted as valid answers for single-answer and array-style bases.

When report filters are active, the displayed base is calculated from the filtered response set.

Report Language

Available in Advanced and Expert.

Reports are displayed in the survey base language by default.

For multilingual surveys, a specific report language can be requested with the `lang` URL parameter:

```
https://example.org/index.php/plugins/direct?plugin=Reports&id=<report-uuid>&lang=en
```

Parameter names are accepted as `lang`, `Lang`, or `LANG`. The value must be a two-letter language code and is only used if the language exists for the survey. Invalid or unavailable language codes fall back to the survey base language.

When a survey has more than one language, the report header displays a language dropdown next to the print and fullscreen controls. The dropdown keeps active report filters in the URL when switching languages.

Global Plugin Settings

Global settings apply to all surveys and are configured in the LimeSurvey Plugin Manager.

Base URL

The LimeSurvey base URL used by plugin operations that require an absolute URL. This text field is filled automatically when the plugin is activated and normally does not need to be changed.

Create default report on survey activation

Automatically creates one active default report when a survey is activated, provided no report exists for that survey yet. This setting is enabled by default.

Required responses

Defines the default minimum number of completed responses required before a report is displayed. A value of `0` disables the minimum threshold and is the default.

This default is copied to newly created default reports and can be changed later for an individual report.

Default report design

Available in Expert.

The appearance of reports can be adapted with individual report designs. Survey Consulting will be happy to create a suitable design for you. Contact us at support@survey-consulting.com or use our contact page.

Default chart type for list questions

Defines the default chart type for list-style questions. Pie chart is selected by default, and the setting is available in all packages:

- List (Radio) (`L`)
- List (Dropdown) (`!`)
- List with comment (`O`)
- Yes/No (`Y`)
- Gender (`G`)

Available chart types are:

- Automatic (Bar chart)
- Pie chart
- Bar chart
- Column chart
- Stacked bar chart

This default can be overridden for an individual question through the question-level Chart type attribute in the Expert package.

Default collapse threshold for text answer lists

Available in Advanced and Expert.

Defines how many text answers are shown before the remaining answers are placed inside a collapsed section. The default is `20`.

A value of `0` initially collapses the complete answer list. The value can be overridden in the survey-level plugin settings.

Show chart export icon by default

PNG export is available in Advanced and Expert. SVG and CSV export are available in Expert.

Controls whether charts display the ApexCharts export icon for PNG, SVG, and CSV downloads. This setting is enabled by default.

This value can be overridden in the survey-level plugin settings.

Survey-Level Settings

Survey-level settings are configured under Survey Settings → Plugins → Reports.

Activate reporting feature for this survey

Enables report administration for the survey and adds a Reports entry to the survey tools menu. This setting is disabled by default.

Send report link when a new report is created

Available in Expert.

Immediately sends the report URL whenever a new report is created manually or automatically. This notification is event-based and does not require a cron job. The setting is disabled by default.

At least one report link recipient must be configured, an email template must be selected, and the selected template must contain the `{REPORTLINK}` placeholder.

Use survey expiration date for scheduled report link email

Available in Expert.

Sends report links on the survey expiration date. When enabled, the alternative scheduled report link sending date is ignored. The survey must have an expiration date, and a daily cron job must run the plugin command described under Scheduled Email Notifications. The setting is disabled by default.

Report link email recipients

Available in Expert.

Defines the recipients for immediate and scheduled report link emails. Multiple addresses can be separated by semicolons. The survey administrator email address is used by default. For example:

```
first@example.org;second@example.org
```

If this field is empty, the survey administrator email address is used as fallback.

Alternative scheduled report link sending date

Available in Expert.

Sends report links on a specific date in `Y-m-d` format. This value is used only when Use survey expiration date for scheduled report link email is disabled. The field is empty by default, which disables fixed-date sending.

A daily cron job is required.

Email template for newly created reports

Available in Expert.

Defines which LimeSurvey administrator email template is used for immediate notifications sent when a new report is created:

- Basic admin notification
- Detailed admin notification

Add `{REPORTLINK}` to the selected template where the linked report URL should appear.

Scheduled notifications use the basic admin notification template.

Collapse threshold for text answer lists

Available in Advanced and Expert.

Overrides the global collapse threshold for this survey. The global setting is used by default.

- Use a positive number to show that many answers before the collapsed section.
- Use `0` to collapse the complete answer list initially.
- Leave the survey-specific value unchanged to use the global default.

Show chart export icon

PNG export is available in Advanced and Expert. SVG and CSV export are available in Expert.

Controls whether charts in this survey display the ApexCharts export icon for PNG, SVG, and CSV downloads. The global setting is used by default.

Question Attributes

Question attributes are configured in the `Reports` attribute group of an individual question.

Include question at report

Controls whether the question is included in generated reports. This setting is enabled by default.

Chart type

Available in Expert.

Overrides the global chart type default for list-style questions:

- List (Radio) (`L`)
- List (Dropdown) (`!`)
- List with comment (`O`)
- Yes/No (`Y`)
- Gender (`G`)

Leave the field empty to use the global default.

Available chart types are:

- Automatic (Bar chart)
- Bar chart
- Column chart
- Stacked bar chart
- Pie chart

Multiple Choice questions are displayed as Bar charts by default. Array and matrix questions are always displayed as Stacked Bar charts.

Use as filter question

Available in Advanced and Expert.

Displays a List (Radio) question as a dynamic report filter. This setting is disabled by default and is only available for question type `L`.

Report Settings

Reports can be created and edited from the survey-specific Reports administration page.

Report title

The heading displayed at the top of the public report.

Minimum responses required

The number of completed responses required before the report becomes available. Use `0` to disable this requirement.

Report design

Available in Expert.

The report design used for this individual report. Available designs are provided by registered design plugins. Select the built-in design to use the default report layout.

Valid from

Available in Expert.

An optional date before which the report is not available.

Valid until

Available in Expert.

An optional expiration date after which the report is no longer available.

Active state

Reports can be activated or deactivated from the administration pages. An inactive report displays an informational error instead of its results.

Scheduled Email Notifications

Available in Expert.

Sending report links on a fixed date or when a survey expires requires a daily cron job or scheduled task.

Run:

```
php application/commands/console.php plugin --target=Reports --function=sendReportLinkEmail
```

The command evaluates all active surveys and sends report links when the configured conditions match the current date.

Contact

support@survey-consulting.com

https://survey-consulting.com/about-us/contact/

License and Third-Party Components

The Reports plugin code is licensed under the GNU General Public License version 2 or later (`GPL-2.0-or-later`). Third-party components retain their own licenses.

ApexCharts licensing

This plugin includes ApexCharts 4.7.0 for chart rendering. This version is licensed under the MIT License and may be used, modified, and distributed, including for commercial purposes. The required copyright notice and complete MIT License are included with the bundled library.