Sequential Scrub and Resilver Adjustments

Beginning with the release of FreeNAS 11.1, the algorithm used for scrubs and resivers received many performance improvements, most noticeably on fragmented pools.

Issue: Legacy Behavior

Some users might wish to revert to the old algorithm for scrub and resilver.

**Fix: Revert to Old Behavior**

The legacy scrub algorithm can be enabled by setting this `sysctl` tunable in the `Shell` console:

```bash
sysctl -w vfs.zfs.zfs_scan_legacy=1
```

If a scrub is already in progress, it can be paused, the tunable set, and the scrub resumed with these commands: `zpool scrub -p poolname`, `sysctl -w vfs.zfs.zfs_scan_legacy=1`, and `zpool scrub poolname`

Issue: System Load During Scrubs or Resivers

In FreeNAS 11.1 and 11.1-U1, resilver and scrub delays were both set to 0. This can keep the system too busy to do other work when a scrub or resilver is active.

**Fix: Adjust Scrub and Silver Delay Settings**

Two `sysctl` tunables (System > Tunables) affect scrub and resilver speed and system availability:

```bash
vfs.zfs.resilver_delay

vfs.zfs.scrub_delay
```

Setting the resilver delay to 2 and the scrub delay to 4 limits the IOPS used for these functions, providing some reserve for normal operations:

```bash
sysctl vfs.zfs.resilver_delay=2

sysctl vfs.zfs.scrub_delay=4
```

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>checkbox</td>
<td>Set to run resilver tasks between the configured times.</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td><strong>Value</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Begin Time</td>
<td>drop-down</td>
<td>Choose the hour and minute when resilver tasks can be started.</td>
</tr>
<tr>
<td>End Time</td>
<td>drop-down</td>
<td>Choose the hour and minute when new resilver tasks can no longer be started. This does not affect active resilver tasks.</td>
</tr>
<tr>
<td>Days of the Week</td>
<td>checkboxes</td>
<td>Select the days to run resilver tasks.</td>
</tr>
</tbody>
</table>