

What happens on my production ?

Dig into real time metrics using Pinba

What is Pinba ?

“Pinba is a statistics server using MySQL as an interface. It accumulates and processes data sent by PHP processes and displays statistics in a human-readable form, also providing a read-only interface to the raw data”.

Antony Dovgal

What is Pinba ?

- **Php Is Not a Bottleneck Anymore**
- Provides live metrics from production
- Almost no impact on performance
- Exploration tool
- Perfect tool to detect bottlenecks

Concepts

- Request
- Timer
- Tag

Concepts - request

- Contains all thread's data
 - hostname
 - server_name
 - script_name
 - generation time
 - memory usage
 - status code
 - ...

Concepts - timer

- time it takes to execute part of the code

```
// start timer
$pinbaTimer = $this->pinbaService->startTimer(
    [] // tags
);

// do your thing
$value = $this->memcache->get($this->prefix . $key);

// stop timer
$this->pinbaService->stopTimer($pinbaTimer);
```

- unlimited number per request

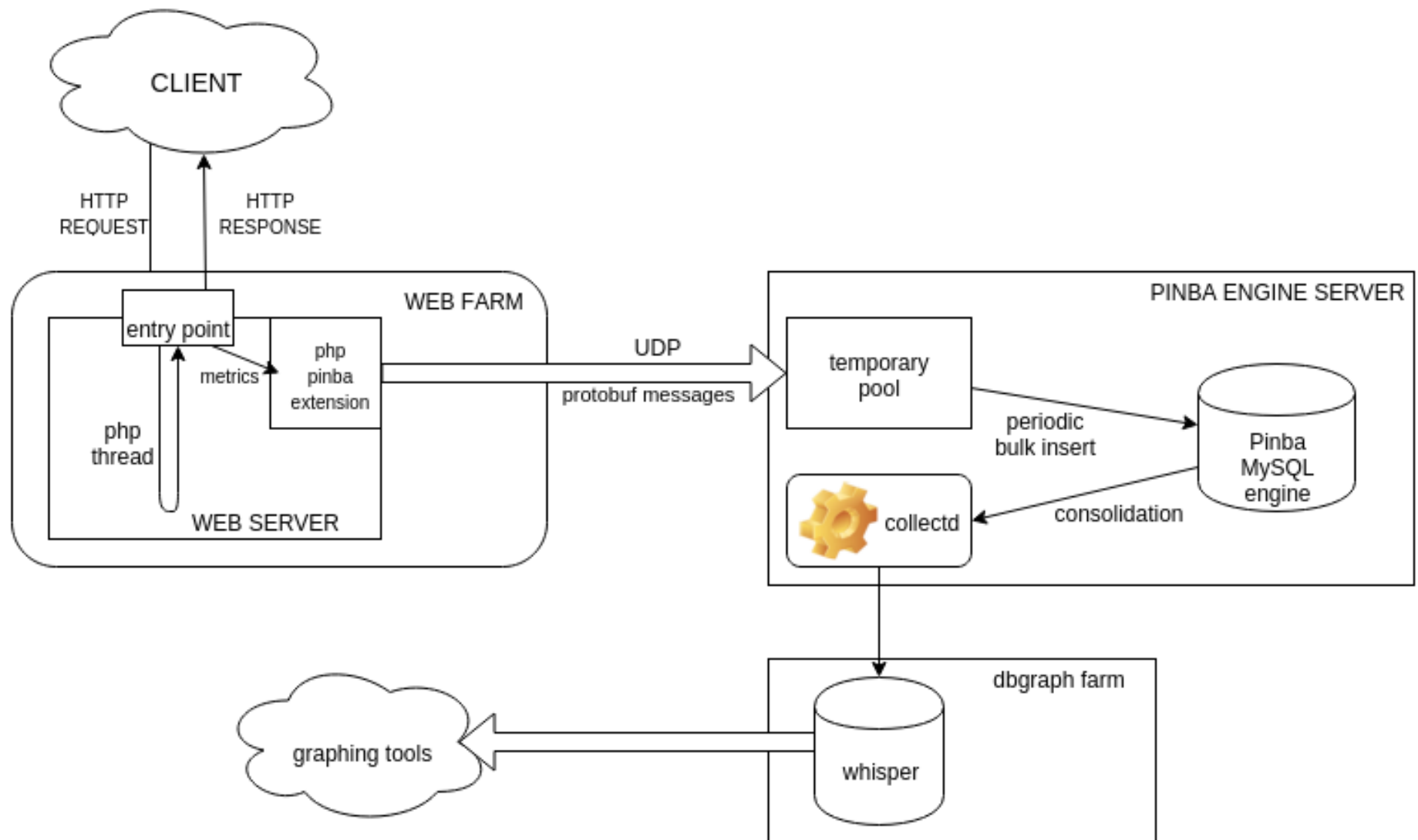
Concepts - tag

- used to describe timers

```
$pinbaTimer = $this->pinbaService->startTimer([  
    'group' => 'memcached',  
    'memcached' => $this->pinbaPool,  
    'method' => 'get',  
    'namespace' => 'dm_cache'  
]);  
$value = $this->memcache->get($this->prefix . $key);  
$this->pinbaService->stopTimer($pinbaTimer);
```

- aggregate metrics in reports
- unlimited number per timer

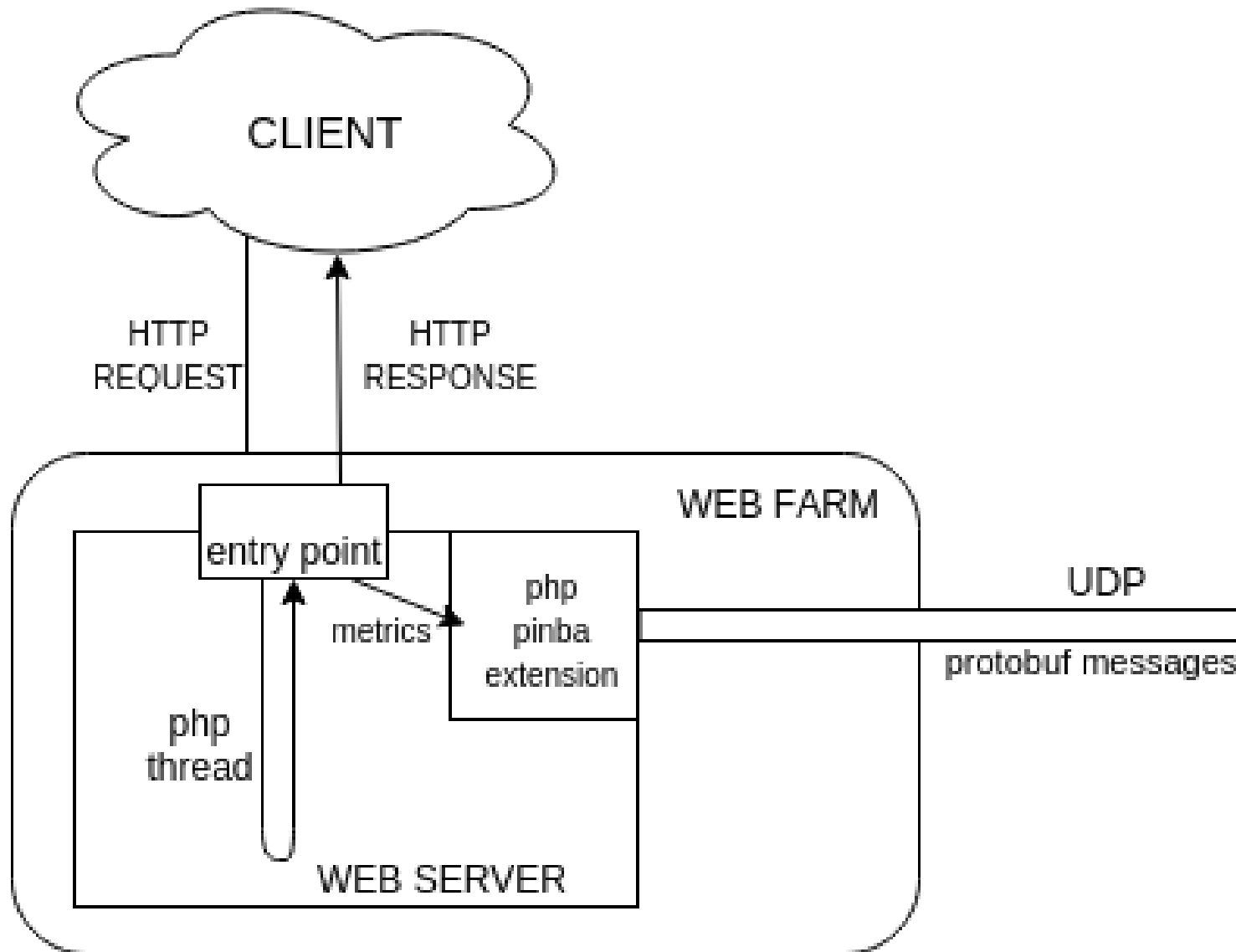
Implementation example



Client / Server

- Client : PHP extension
 - gather and send statistics
 - manage timers
 - sends protobuf packet to server over UDP
- Server : Pinba engine
 - Store raw data sent by PHP extension
 - Aggregates these data in reports

Client : PHP extension



Client

- Out of the box metrics
- Custom metrics
- Request tags

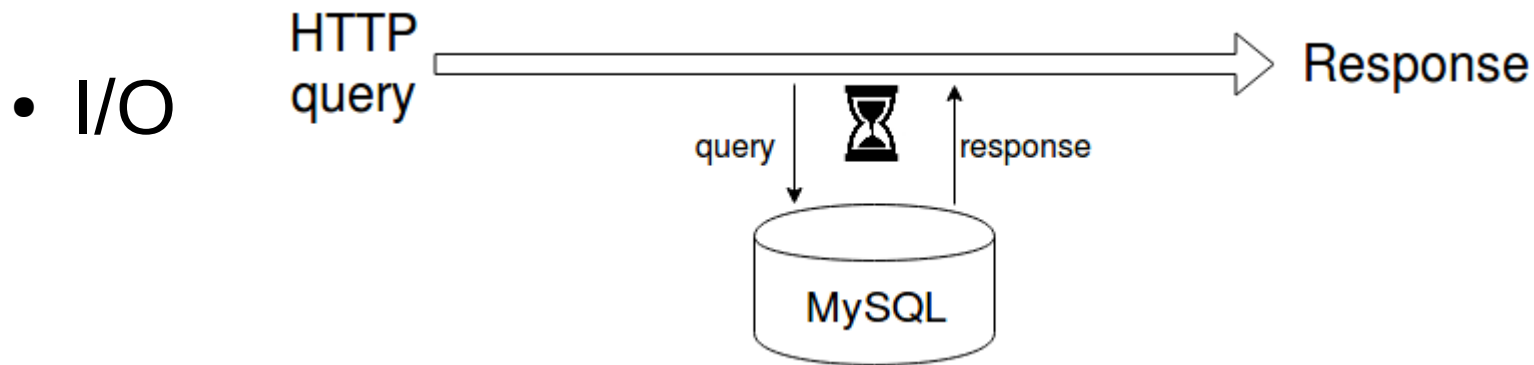
Out of the box metrics

Each PHP script sends at the request shutdown :

- hostname
- server_name
- script_name
- document_size
- memory_peak
- request_time
- ru_utime
- ru_stime
- status
- memory_footprint

Custom metrics

Use tags to describe your current metrics



- Algo
 - time it takes for an algorithm to be executed

Tag your I/Os - example1

```
namespace optimy\shared\library\monitoring\pinba;

use Doctrine\DBAL\Logging\SQLLogger;

class MysqlDecorator implements SQLLogger
{
    /**
     * @var optimy\shared\library\monitoring\pinba\PinbaTimer
     */
    protected $pinba;

    /**
     * @var array
     */
    protected $timers = [];

    public function __construct(PinbaInterface $pinba)
    {
        global $container;
        $this->pinba = $pinba;
    }
}
```

Tag your I/Os - example1

```
/**
 * {@inheritdoc}
 * starts pinba timer
 */
public function startQuery($sql, array $params = null, array $types = null)
{
    $sqlArray = explode(' ', $sql);

    $this->timers[++$this->currentQuery] = $this->pinba->startTimer([
        'group' => 'mysql',
        'mysql' => 'mysql',
        'method' => $this->getMethod($sqlArray),
        'table' => $this->getTable($sqlArray)
    ]);
}

/**
 * {@inheritdoc}
 * stops pinba timer
 */
public function stopQuery()
{
    $this->pinba->stopTimer($this->timers[$this->currentQuery]);
    unset($this->timers[$this->currentQuery]);
}
```

Tag your I/Os - example2

```
class ESFactory
{
    protected $configService;
    protected $loggerService;
    protected $pinbaService;

    protected $dmESInstances = array();
    protected $ESInstances = array();

    public function __construct($configService, $loggerService, $pinbaService)
    {
        $this->configService = $configService;
        $this->loggerService = $loggerService;
        $this->pinbaService = $pinbaService;
    }

    public function get($clusterName, $namespace='void')
    {
        // handle DM ES client with his namespace
        $dmESName = $clusterName . '.' . $namespace;
        if (empty($this->dmESInstances[$dmESName]))
        {
            // get config
            $config = $this->configService->getValue('ELASTICSEARCH_CONFIG');

            // create instance
            $this->dmESInstances[$dmESName] = new ES(
                $this->getES($clusterName, $config),
                $clusterName,
                $namespace,
                $this->loggerService,
                $this->pinbaService
            );
        }
    }
}
```

Tag your I/Os - example2

```
public function create($params = [])
{
    $pinbaTimer = $this->pinbaService->startTimer(
        $this->getPinbaTags('create', $params)
    );
    $result = $this->ESClient->create($params);
    $this->pinbaService->stopTimer($pinbaTimer);

    return $result;
}

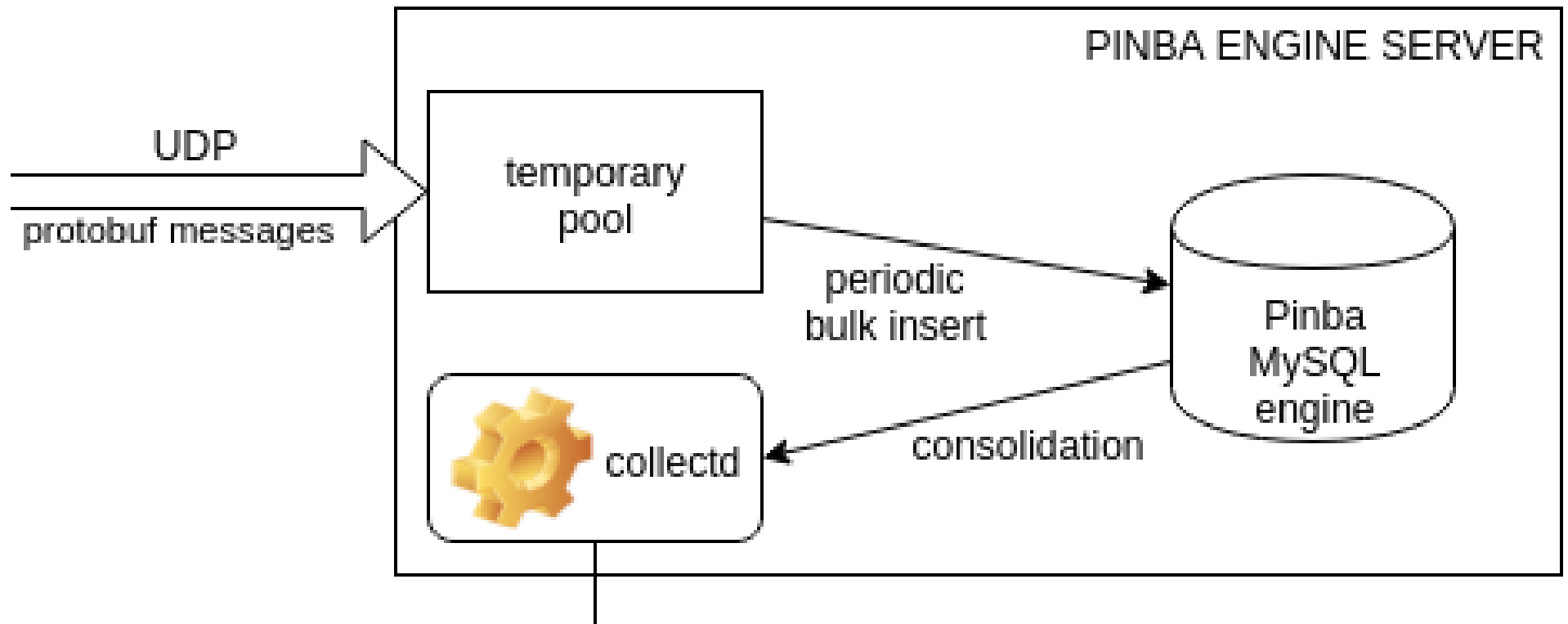
public function update($params = [])
{
    $pinbaTimer = $this->pinbaService->startTimer(
        $this->getPinbaTags('update', $params)
    );
    $result = $this->ESClient->update($params);
    $this->pinbaService->stopTimer($pinbaTimer);

    return $result;
}
```

Request tags

- Use it to flag an entire request
 - Format (html/json/...)
 - Localization
 - IsBot
 - IsAuth
 - Provider : A/B testing PHP/HHVM

Server : Pinba Engine



Server

- How it works
- Storage
 - Raw data
 - Basic reports
 - Custom reports

How it works

- Listen to configured port
- Reads/decode protobuf packets
- Store data to temporary pool
- Copy temp pool into main pool periodically (stats_gathering_period)
- Drops outdated records (stats_history)
- Update indexes and reports

Storage

- MySQL PINBA engine
- Read Only
- Cyclic buffer (15 minutes by default, I recommend 60 seconds for high traffic)

Storage – Raw Data

```
mysql> desc request;
```

Field	Type	Null	Key	Default	Extra
id	int(11)	NO	PRI	0	
hostname	varchar(32)	YES		NULL	
req_count	int(11)	YES		NULL	
server_name	varchar(64)	YES		NULL	
script_name	varchar(128)	YES		NULL	
doc_size	float	YES		NULL	
mem_peak_usage	float	YES		NULL	
req_time	float	YES		NULL	
ru_utime	float	YES		NULL	
ru_stime	float	YES		NULL	
timers_cnt	int(11)	YES		NULL	
status	int(11)	YES		NULL	
memory_footprint	float	YES		NULL	
schema	varchar(16)	YES		NULL	
tags_cnt	int(11)	YES		NULL	
tags	varchar(1024)	YES		NULL	
timestamp	int(11)	YES		NULL	

```
17 rows in set (0.00 sec)
```

Storage – Raw Data

script_name	doc_size	mem_peak_usage	status	memory_footprint	hostname
[PROD]video_item	5.422	10240	200	54728	web-065
[PROD]widget_dispatch_v3	38.056	14848	200	31624	web-031
[PROD]video_list	154.369	20736	200	87176	web-004
[PROD]rest_api	0.235	22784	200	51568	web-128
[PROD]rest_api	9.306	34048	200	55624	web-024
[PROD]rest_api	5.448	35072	200	54676	web-041
[PROD]controller_dispatch	2.003	11776	200	36388	web-033
[PROD]widget_v3_chunks	22.525	12544	200	33544	web-165
[PROD]cdn_director	0	9984	302	42892	web-034
[PROD]rest_api	0.019	20736	200	32500	web-085

Storage – Raw Data

```
mysql> SELECT COUNT(1) from request;
```

COUNT(1)
1197502

Storage – Basic Reports

- **report_by_script_name** Request data grouped by script_name
- **report_by_server_name** Request data grouped by server_name
- **report_by_hostname** Request data grouped by hostname
- **report_by_server_and_script** Request data grouped by server_name and script_name
- **report_by_hostname_and_script** Request data grouped by hostname and script_name
- **report_by_hostname_and_server** Request data grouped by hostname and server_name
- **report_by_hostname_server_and_script** Request data grouped by hostname, server_name and script_name

Storage – Basic Reports

```
mysql> desc report_by_script_name;
```

Field	Type	Null	Key	Default	Extra
req_count	int(11)	YES		NULL	
req_per_sec	float	YES		NULL	
req_time_total	float	YES		NULL	
req_time_percent	float	YES		NULL	
req_time_per_sec	float	YES		NULL	
ru_untime_total	float	YES		NULL	
ru_untime_percent	float	YES		NULL	
ru_untime_per_sec	float	YES		NULL	
ru_stime_total	float	YES		NULL	
ru_stime_percent	float	YES		NULL	
ru_stime_per_sec	float	YES		NULL	
traffic_total	float	YES		NULL	
traffic_percent	float	YES		NULL	
traffic_per_sec	float	YES		NULL	
script_name	varchar(128)	YES		NULL	
memory_footprint_total	float	YES		NULL	
memory_footprint_percent	float	YES		NULL	
req_time_median	float	YES		NULL	
index_value	varchar(256)	YES		NULL	

Storage – Basic Reports

```
mysql> SELECT script_name, req_count, req_per_sec, memory_footprint_tot  
FROM report_by_script_name  
ORDER BY req_count DESC  
LIMIT 10;
```

script_name	req_count	req_per_sec	memory_footprint_total	req_time_median
[PROD]rest_api	276508	4608.47	12916600 000	0.0514983
[PROD]embed_player	162808	2713.47	80749900 00	0.109837
[PROD]cdn_director	122526	2042.1	51031600 00	0.0280768
[PROD]widget_dispatch_v3	105822	1763.7	43493500 00	0.049904
[PROD]history_logger	98481	1641.35	40608600 00	0.0127946
[PROD]video_item	66250	1104.17	35634200 00	0.254091
[PROD]autocomplete_list	56313	938.55	23227900 00	0.0104993
[PROD]webapp_ads_mopub	52187	869.783	21839800 00	0.0326299
[PROD]gravity_report	45992	766.533	18952900 00	0.0167253
[PROD]player_data	33584	559.733	17245400 00	0.113651

Storage – Basic Reports

```
mysql> SELECT hostname, server_name, script_name, req_count, req_per_sec  
FROM report_by_hostname_server_and_script  
ORDER BY req_count DESC  
LIMIT 2;
```

hostname	server_name	script_name	req_count	req_per_sec	req_time_medlan
web-121	api.dailymotion.com	[PROD]api_oauth_token	4144	69.0667	0.0104435
web-038	api.dailymotion.com	[PROD]rest_api	3455	57.5833	0.0441618

Storage – Custom Reports

```
mysql> show create table tag_report_mysql_method;
+-----+-----+
| Table | Create Table |
+-----+-----+
| tag_report_mysql_method | CREATE TABLE `tag_report_mysql_method` (
  `script_name` varchar(128) DEFAULT NULL,
  `mysql` varchar(64) DEFAULT NULL,
  `method` varchar(64) DEFAULT NULL,
  `req_count` int(11) DEFAULT NULL,
  `req_per_sec` float DEFAULT NULL,
  `hit_count` int(11) DEFAULT NULL,
  `hit_per_sec` float DEFAULT NULL,
  `timer_value` float DEFAULT NULL,
  `timer_median` float DEFAULT NULL,
  `index_value` varchar(256) DEFAULT NULL
) ENGINE=PINBA DEFAULT CHARSET=latin1 COMMENT='tag2_report:mysql,method'
```

Storage – Custom Reports

```
$pinbaTimer = $this->pinbaService->startTimer([  
    'group' => 'memcached',  
    'memcached' => $this->pinbaPool,  
    'method' => 'get',  
    'namespace' => 'dm_cache'  
]);  
$value = $this->memcache->get($this->prefix . $key);  
$this->pinbaService->stopTimer($pinbaTimer);|
```

Storage – Custom Reports

```
mysql> show create table tag_report_memcached_method_namespace;
```

```
+-----+-----+
| Table                                     | Create Table
+-----+-----+
| tag_report_memcached_method_namespace | CREATE TABLE `tag_report_memcached_method_namespace` (
  `script_name` varchar(128) DEFAULT NULL,
  `memcached` varchar(64) DEFAULT NULL,
  `method` varchar(64) DEFAULT NULL,
  `namespace` varchar(64) DEFAULT NULL,
  `req_count` int(11) DEFAULT NULL,
  `req_per_sec` float DEFAULT NULL,
  `hit_count` int(11) DEFAULT NULL,
  `hit_per_sec` float DEFAULT NULL,
  `timer_value` float DEFAULT NULL,
  `timer_median` float DEFAULT NULL,
  `index_value` varchar(256) DEFAULT NULL
) ENGINE=PINBA DEFAULT CHARSET=latin1 COMMENT='tagN_report:memcached,method,namespace' |
+-----+-----+
1 row in set (0,00 sec)
```

Storage – Custom Reports

```
mysql> SELECT `group`,
  SUM(req_count) AS req,
  AVG(timer_median) AS timer_median,
  SUM(timer_value)/SUM(hit_count) AS tph,
  SUM(timer_value)/SUM(req_count) AS tpr,
  SUM(timer_value) AS timer_total
FROM tag_report_group_method
WHERE script_name='[PROD]video_item'
  AND `group` != "int_api"
GROUP BY `group`
ORDER BY timer_total DESC;
```

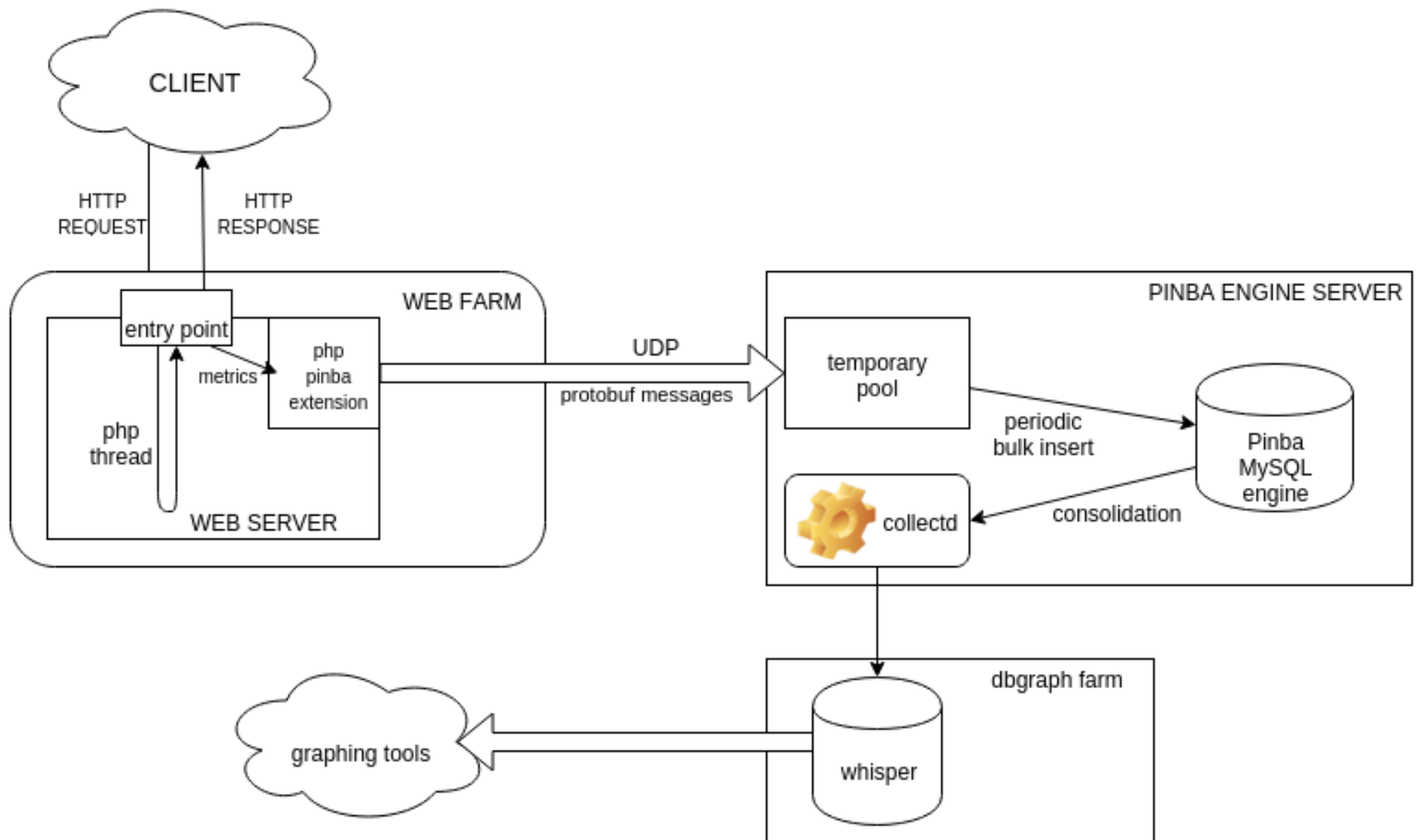
group	req	timer_median	tph	tpr	timer_total
mysql	118124	0.009819403290748596	0.003329653064723691	0.05909533790217434	6980.5776943564415
memcached	188049	0.00976656749844551	0.0003179184672595343	0.01067464985796328	2007.3572311401367
Elastic	32049	0.011334048118442297	0.016838098360988627	0.026841974640797184	860.2584452629089
Redis	48999	0.009611431136727333	0.011986066101148827	0.012204265879965226	597.9968238524161
DMX	61436	0.009767306968569756	0.0016191925102048436	0.0073448760845254615	451.23980712890625
Curl	24882	0.06987743234882753	0.008533559191620778	0.008533559191620778	212.3320198059082
cleeng	50	0.12915635108947754	0.1352721940790749	1.0902938842773438	54.51469421386719
Facebook API	22	0.5436198115348816	0.5515929568897594	0.5515929568897594	12.135045051574707
Live API	1	0.01953125	0.0049230000004172325	0.0049230000004172325	0.0049230000004172325

Storage – Custom Reports

```
mysql> SELECT mysql, method, timer_value,  
    timer_value/req_count AS avg_timer_value,  
    hit_count/req_count AS avg_op_count,  
    timer_value/hit_count AS avg_op_value,  
    hit_count,  
    req_count  
FROM tag_report_mysql_method  
WHERE method='select'  
    AND script_name='[PROD]video_item'  
    AND req_count > 200  
ORDER BY avg_op_count DESC  
LIMIT 4;
```

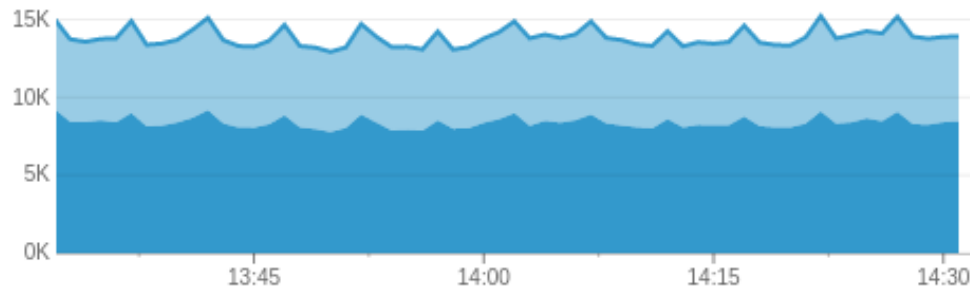
mysql	method	timer_value	avg_timer_value	avg_op_count	avg_op_value	hit_count	req_count
video	select	3971.99	0.10144789052722653	16.6880	0.006079103953896177	653384	39153
video_view_summary	select	264.027	0.007824405328308366	12.6024	0.000620868312581275	425254	33744
static_asset_video_sprite	select	15.4905	0.022613802443455604	7.6496	0.0029561936400318875	5240	685
video_has_repost	select	1468.93	0.027541118671605483	6.7955	0.0040528553527407	362444	53336

Implementation example

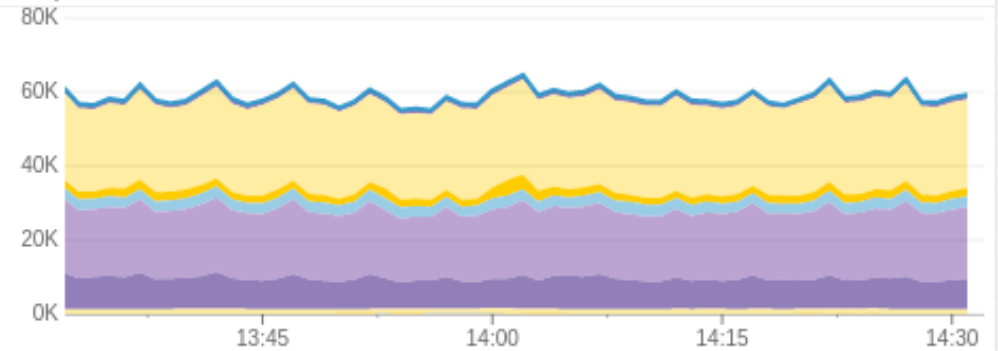


Collect and graph

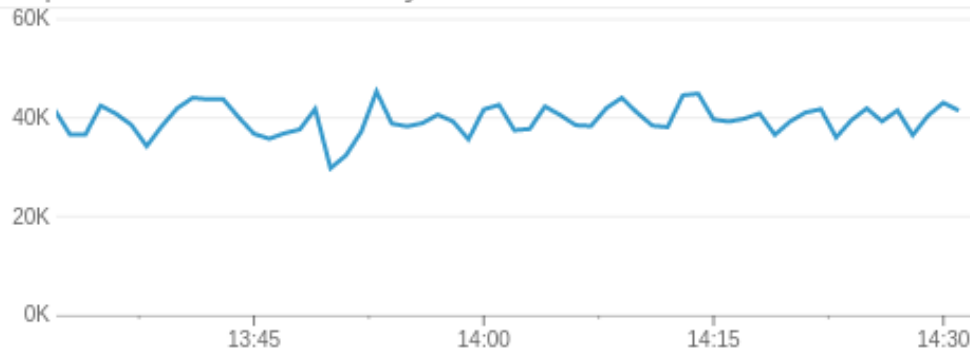
Request count VS io request count



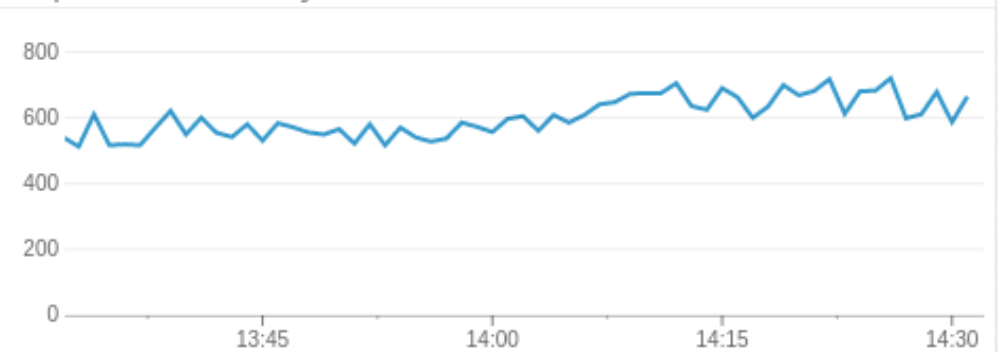
Request count io



Request count auth:no, bot:yes



Request count auth:yes, bot:no



Sample – execution time repartition

```
SELECT `script_name`,
       count(1) AS n,
       AVG(`req_time`) AS avg_req_time,
       SUM(`req_time` < 0.2) AS n02,
       SUM(`req_time` BETWEEN 0.2 AND 0.5) AS n05,
       SUM(`req_time` BETWEEN 0.5 AND 1) AS n1,
       SUM(`req_time` BETWEEN 1 AND 2) AS n2,
       SUM(`req_time` BETWEEN 2 AND 4) AS n4,
       SUM(`req_time` >= 4) AS ng4
FROM `request`
WHERE `script_name` LIKE '[PROD]%'
GROUP BY `script_name`;
```

Sample – execution time repartition

script_name	n	avg_req_time	n02	n05	n1	n2	n4	ng4
[PROD]user_list	17	3.235000035698142	7	4	0	0	0	6
[PROD]widget_v3_chunks_following	2	1.1330000162124634	0	0	0	2	0	0
[PROD]stats_tableau	1	1.0069999694824219	0	0	0	1	0	0
[PROD]browse	12	0.7880000124375025	0	8	2	1	1	0
[PROD]atv_page	110	0.7268818307583305	73	28	2	1	3	3
[PROD]register_activate	5	0.7162000212818385	2	0	0	3	0	0
[PROD]potplayer_recommendation	4	0.556000005453825	0	2	1	1	0	0
[PROD]widget_v3_chunks_whattowatch	698	0.48254584614988044	327	139	93	133	6	0
[PROD]channel_home	24	0.43362499876335886	12	4	3	5	0	0
[PROD]facebookvideotab	1	0.38100001215934753	0	1	0	0	0	0
[PROD]jukebox_widget	2537	0.33842609401287166	1038	659	847	2	0	0
[PROD]subscription_management	6	0.2893333323299885	1	5	0	0	0	0
[PROD]video_list	19821	0.2876157106165493	9110	6189	4431	111	3	0
[PROD]stats_video	2	0.2824999988079071	1	1	0	0	0	0
[PROD]hub_item	14	0.24578571426016943	8	5	1	0	0	0
[PROD]stats_monetization	18	0.2252777785373231	10	8	0	0	0	0
[PROD]following	1	0.22100000083446503	0	1	0	0	0	0
[PROD]home	3558	0.2169229903465431	2612	490	211	234	13	0
[PROD]stats_user_data	114	0.19879824605263902	58	54	2	0	0	0
[PROD]settings	38	0.18597368359271632	24	13	1	0	0	0
[PROD]widget_dispatch_v1	1117	0.18401969580651797	932	35	30	120	0	0
[PROD]video_edit	29	0.18096551543165898	23	3	3	0	0	0
[PROD]widget_v3_chunks_video	17389	0.16317884877398658	12153	4934	288	15	0	0
[PROD]mini_stats	4	0.16024999599903822	2	2	0	0	0	0
[PROD]video_item	74096	0.15553998871958136	53733	19005	1258	91	28	0
[PROD]signin	113	0.14338053136536505	74	38	1	0	0	0
[PROD]follower_management	5	0.13759999703615905	4	1	0	0	0	0
[PROD]api_healthcheck	2	0.12449999898672104	2	0	0	0	0	0
[PROD]widget_v3_chunks_videos	237	0.12015611814327129	194	43	0	0	0	0
[PROD]playlist_list	78	0.11814102567493534	64	11	3	0	0	0

Sample – memory usage

```
SELECT `script_name`,  
       COUNT(1) AS n,  
       AVG(`mem_peak_usage`) AS memory,  
       MIN(`mem_peak_usage`) AS min,  
       MAX(`mem_peak_usage`) AS max,  
FROM `request`  
WHERE `script_name` LIKE '[PROD]%'  
GROUP BY `script_name`  
ORDER BY max DESC  
LIMIT 30;
```

Sample – memory usage

script_name	n	memory	min	max
[PROD]advanced_api	15226	9544.122422172599	2048	45068
[PROD]rest_api	111302	10010.630932058722	2048	45056
[PROD]controller_dispatch	5896	2952.1845318860246	2048	43012
[PROD]atv_page	92	11323.869565217392	2048	40960
[PROD]admin	494	3125.8947368421054	2048	34816
[PROD]browse	9	14112.888888888889	4136	30720
[PROD]user_home	1659	7504	2048	26636
[PROD]player_data	37920	12862.773839662448	2048	26628
[PROD]video_item	76901	9722.573802681369	2048	26624
[PROD]widget_v3_chunks_video	16578	8319.86102062975	2048	24576
[PROD]embed_player	171719	10586.749934485992	2048	24576
[PROD]playlist_list	85	6965.929411764706	2048	22536
[PROD]widget_v3_chunks_following	4	18944	16384	22528
[PROD]home	2925	4238.134700854701	2048	20480
[PROD]following	6	6826.666666666667	2048	20480
[PROD]video_sequence	47	10152.851063829787	2048	20480
[PROD]widget_v3_chunks_whattowatch	685	5238.096350364964	2048	20480
[PROD]jukebox_widget	2202	4599.164396003633	2048	18432
[PROD]channel_home	19	7006.315789473684	2048	18432
[PROD]video_list	18685	3016.593845330479	2048	18432
[PROD]widget_dispatch_v3	468	2778.803418803419	2048	14336
[PROD]user_list	12	3925.3333333333335	2048	14336
[PROD]video_edit	22	3909.818181818182	2048	12288
[PROD]webapp_ads_mopub	28168	2837.1576256745243	2048	12288
[PROD]live_diagnostic	1	12288	12288	12288
[PROD]user_widget	821	2494.5188794153473	2048	12288
[PROD]notfound	21502	2786.3543856385454	2048	12288
[PROD]widget_v3_chunks_videos	252	2803.809523809524	2048	10240
[PROD]admin_log	1	10240	10240	10240
[PROD]upload_new	3069	2559.165852069078	2048	10240

Sample queries – slowest pages

```
SELECT `script_name`,  
       `req_count`,  
       `req_time_total`,  
       `req_time_total` / `req_count` AS avg_req_time,  
       `req_time_median`  
FROM `report_by_script_name`  
WHERE `script_name` LIKE '[PROD]%'  
ORDER BY `req_time_median` DESC  
LIMIT 30;
```

Sample queries – slowest pages

script_name	req_count	req_time_total	avg_req_time	req_time_median
[PROD]widget_v3_chunks_following	4	5.72764	1.4319102764129639	1.23047
[PROD]stats_video	1	0.47027	0.4702700078487396	0.488281
[PROD]jukebox_widget	2327	788.708	0.3389377962841104	0.421645
[PROD]facebookvideotab	1	0.381237	0.3812370002269745	0.390625
[PROD]widget_v3_chunks_welcome	4	2.12562	0.5314040184020996	0.351562
[PROD]subscription_management	12	3.07293	0.2560770908991496	0.3125
[PROD]following	3	0.948456	0.3161519964536031	0.283203
[PROD]follower_management	6	1.40243	0.23373850186665854	0.273438
[PROD]browse	13	3.59231	0.2763313146737906	0.253906
[PROD]widget_v3_chunks_whattowatch	679	334.523	0.4926703429186994	0.251953
[PROD]channel_home	42	14.3059	0.3406165213811965	0.244141
[PROD]video_list	18896	5293.81	0.2801548039681017	0.21842
[PROD]hub_item	25	4.91461	0.19658443450927734	0.14974
[PROD]api_healthcheck	3	0.3764	0.12546666463216147	0.123698
[PROD]setpartner	1	0.101126	0.10112600028514862	0.117188
[PROD]widget_v3_chunks_video	16634	2758.84	0.16585574620787993	0.111095
[PROD]video_item	70750	10878.8	0.1537634855344523	0.110254
[PROD]stats_user_data	128	19.7072	0.15396276116371155	0.107422
[PROD]admin_humble_moderation	35	3.04365	0.08696139880589077	0.102539
[PROD]developer_tools	1	0.090281	0.09028100222349167	0.0976562
[PROD]widget_v3_chunks_videos	258	29.4262	0.11405484990556111	0.0878906
[PROD]developer_api	4	0.342817	0.0857042521238327	0.0878906
[PROD]mini_stats	4	0.615471	0.15386775135993958	0.078125
[PROD]user_list	12	11.4904	0.9575345516204834	0.078125
[PROD]video_edit	20	3.47698	0.17384920120239258	0.078125
[PROD]player_data	37169	3453.12	0.09290333405357959	0.0739881
[PROD]embed_player	167643	11884.2	0.07088991632330309	0.0709607
[PROD]about	5	0.342289	0.0684578001499176	0.0683594
[PROD]developer	4	0.250518	0.06262949854135513	0.0683594
[PROD]video_sequence	37	2.56976	0.06945291725364891	0.0651042

Sample queries – I/O global usage

```
SELECT `group`,  
       `method`,  
       `timer_value`,  
       `hit_count` / `req_count` AS avg_op_count,  
       `timer_value` / `hit_count` AS avg_op_value,  
       `hit_count`,  
       `req_count`  
FROM `tag_info_group_method`  
ORDER BY `timer_value` DESC  
LIMIT 30;
```

Sample queries – I/O global usage

group	method	timer_value	avg_timer_value	avg_op_count	avg_op_value	hit_count	req_count
es	update	16470.9	8235.4423828125	17.5000	470.596	35	2
memcached	get	7507.02	0.009254633302161527	34.6017	0.0002674617	28067623	811163
mysql	select	7059.56	0.01727676951740754	21.5416	0.000802020	8802226	408616
es	search	6004.12	0.10921142840130874	1.8609	0.0586889	102304	54977
memcached	set	1869.5	0.0041015151510476995	11.1995	0.0003662244	5104802	455808
dmx	call_service	1811.44	0.0071912476669036204	2.0438	0.003518574	514822	251895
curl	get_liftigniter	996.312	0.20517132427586363	1.0218	0.2007883	4962	4856
curl	send_request_retry	441.073	0.038830228963886014	1.0039	0.0386803	11403	11359
sony_psn	get.https://auth.a	354.165	0.4038370234664517	1.0000	0.403837	877	877
memcached	get_multi	255.339	0.0008235758611320988	2.4251	0.000339598	751884	310037
bodyguard	check	127.957	0.055059045604502276	1.2556	0.0438510	2918	2324
es	msearch	127.639	0.011979229916769928	1.0000	0.01197922	10655	10655
curl	store	120.23	1.0831526335295256	1.0000	1.083152	111	111
es	get	104.511	0.1702134197620305	1.1417	0.1490885	701	614
curl	get	97.8847	0.003029454035190947	1.0409	0.00291037	33633	32311
dmx_list	call_list	89.0374	0.0025131918579942287	1.2356	0.00203397	43775	35428
redis	hget	81.2483	0.0008936333755172444	1.7370	0.000514473	157925	90919
facebook	get	76.3044	0.46245080196496213	1.0000	0.4624508	165	165
memcached	set_multi	54.315	0.0008179969098194536	1.2774	0.000640340	84822	66400
mysql	insert	45.6816	0.006398878138946008	12.1948	0.000524719	87059	7139
cleeng	api	45.6193	0.39326996638857087	2.2759	0.172800	264	116
memcached	delete	35.8231	0.003472915923081147	15.4297	0.0002250804	159157	10315
mysql	update	33.5374	0.003290559283605363	4.9400	0.00066611	50348	10192
report	get_service	31.8105	1.2234811782836914	8.1154	0.1507607	211	26
google_plus	get.people.me	23.9546	0.3032223182388499	1.0253	0.2957353	81	79
es	getSource	22.0699	0.03508722763182817	1.7266	0.02032	1086	629
mysql	?	15.9505	0.002703931497747483	6.0644	0.000445868	35774	5899
analytics	post	14.499	0.1271845499674479	1.5263	0.0833278	174	114
google_plus	get.authenticate	13.1735	0.20266857147216796	1.0000	0.2026685	65	65
redis	get	13.1016	0.00020755926339912845	1.0389	0.0001997949	65575	63122

Sample queries – MySQL usage (info)

```
SELECT *  
FROM `tag_info_mysql_method`  
ORDER BY `timer_value` DESC  
LIMIT 30;
```

Sample queries – MySQL usage (info)

mysql	method	hit_count	hit_per_sec	timer_value	timer_median
dailymotion.dailymotion.video	select	279718	4661.97	2843.18	0.0102355
dailymotion.video_view_summary	select	1780374	29672.9	731.55	0.00977059
dailymotion.video	select	1536962	25616	655.938	0.00976637
dailymotion.video_metadata	select	794744	13245.7	510.14	0.00976668
dailymotion.user_has_parent_user	select	925932	15432.2	348.688	0.00976683
dailymotion.video_has_format	select	440964	7349.4	205.035	0.00976598
dailymotion.video_has_repost	select	539060	8984.33	193.025	0.00976675
dailymotion.static_asset_user_avatar	select	393018	6550.3	140.286	0.00976573
dailymotion.publisher	select	259338	4322.3	118.325	0.00976796
dailymotion.dailymotion.tag_freebase	select	13642	227.367	104.609	0.0110029
dailymotion.static_asset_video_thumbnail	select	172570	2876.17	90.6579	0.00976574
dailymotion.player_rules	select	215194	3586.57	89.4938	0.00976726
dailymotion.video_display_aspect_ratio	select	161244	2687.4	83.6961	0.00976684
dailymotion.user	select	144780	2413	83.4563	0.00977156
dailymotion.video_has_criteria	select	166300	2771.67	74.6419	0.00976574
dailymotion.video_bookmark_summary	select	126220	2103.67	43.1696	0.00976562
dailymotion.dailymotion.user	select	3340	55.6667	41.818	0.0100484
dailymotion.static_asset_video_sprite	select	59720	995.333	33.7841	0.00976562
dailymotion.video_extended_data	select	52912	881.867	30.8887	0.00976932
dailymotion.video_featured	select	102	1.7	30.3771	0.297241
dailymotion.video_has_language	select	67070	1117.83	29.987	0.00976679
dailymotion.user_has_preference	select	47460	791	26.512	0.00976562
dailymotion.tag_freebase	select	14848	247.467	26.1075	0.0100736
dailymotion.video_has_ams_rule	select	56522	942.033	24.9865	0.00976597
dailymotion.user_subscription_summary	select	61718	1028.63	22.7526	0.00976562
dailymotion.user_extended_data	select	34082	568.033	17.7458	0.0097662
dailymotion.encoder_task_extended_data	select	43212	720.2	16.1436	0.00976562
dailymotion.content_provider_video	select	35686	594.767	15.8276	0.00976617
dailymotion.dailymotion.playlist	select	23240	387.333	15.7322	0.00977656
dailymotion.encoder_task_has_criteria	select	22552	375.867	15.5014	0.00976562

Sample queries – MySQL usage (report)

```
SELECT *  
FROM `tag_report_mysql_method`  
ORDER BY `timer_value` DESC  
LIMIT 30;
```

Sample queries – MySQL usage (report)

script_name	mysql	method	hit_count	hit_per_sec	timer_value
[PROD]video_item	dailymotion.dailymotion.video	select	68986	1149.77	1178.89
[PROD]rest_api	dailymotion.dailymotion.video	select	91050	1517.5	1094.45
[PROD]video_item	dailymotion.video	select	797622	13293.7	332.202
[PROD]rest_api	dailymotion.video_view_summary	select	593088	9884.8	310.522
[PROD]controller_dispatch	dailymotion.dailymotion.video	select	18752	312.533	252.338
[PROD]video_item	dailymotion.video_metadata	select	388804	6480.07	241.455
[PROD]advanced_api	dailymotion.dailymotion.video	select	4192	69.8667	233.38
[PROD]video_item	dailymotion.video_view_summary	select	604280	10071.3	218.47
[PROD]player_data	dailymotion.dailymotion.video	select	42044	700.733	203.142
[PROD]video_list	dailymotion.dailymotion.video	select	14906	248.433	165.698
[PROD]embed_player	dailymotion.user_has_parent_user	select	340282	5671.37	156.515
[PROD]rest_api	dailymotion.video	select	301390	5023.17	146.116
[PROD]video_item	dailymotion.user_has_parent_user	select	366422	6107.03	140.358
[PROD]rest_api	dailymotion.video_metadata	select	205560	3426	136.044
[PROD]rest_api	dailymotion.dailymotion.tag_freebase	select	15480	258	114.53
[PROD]video_list	dailymotion.video	select	246410	4106.83	111.952
[PROD]video_list	dailymotion.video_view_summary	select	253870	4231.17	101.186
[PROD]widget_v3_chunks_video	dailymotion.dailymotion.video	select	26544	442.4	92.1941
[PROD]video_item	dailymotion.video_has_format	select	201294	3354.9	91.7302
[PROD]video_item	dailymotion.video_has_repost	select	251726	4195.43	89.3106
[PROD]video_list	dailymotion.static_asset_user_avatar	select	226238	3770.63	80.8876
[PROD]video_list	dailymotion.video_metadata	select	108570	1809.5	73.2007
[PROD]embed_player	dailymotion.publisher	select	119378	1989.63	69.6402
[PROD]widget_v3_chunks_video	dailymotion.video_view_summary	select	179444	2990.73	65.8117
[PROD]video_list	dailymotion.video_has_format	select	129132	2152.2	64.0848
[PROD]video_item	dailymotion.publisher	select	112810	1880.17	50.602
[PROD]embed_player	dailymotion.video_view_summary	select	101994	1699.9	49.4526
[PROD]video_item	dailymotion.static_asset_video_thumbnail	select	84806	1413.43	43.9862
[PROD]video_item	dailymotion.player_rules	select	83928	1398.8	38.7373
[PROD]video_item	dailymotion.video_has_criteria	select	86678	1444.63	38.6634

Resources

- <http://pinba.org/>
- https://github.com/tony2001/pinba_engine/wiki
- <http://engineering.dailymotion.com/monitor-your-application-using-pinba/>
- <https://collectd.org/>

Questions ?

